



# Periodic Financing Request Report

---

Project Number: 41456-044  
MFF Number: 41456  
December 2015

## Socialist Republic of Viet Nam: Water Sector Investment Program (Tranche 4)

This document is being disclosed to the public in accordance with ADB's Public Communications Policy 2011.

## CURRENCY EQUIVALENTS

(as of 25 November 2015)

Currency Unit	–	Viet Nam Dong (D)
D1.00	=	\$ 0.0000444583
\$1.00	=	D 22,493.00

## ABBREVIATIONS

ADB	–	Asian Development Bank
DMF	–	design and monitoring framework
EIRR	–	economic internal rate of return
EMP	–	environmental management plan
FFA	–	framework financing agreement
GAP	–	gender action plan
HAWACOM	–	Hanoi Water Company Limited
HPC	–	Ha Noi Peoples' Committee
ICT	–	information communication technology
IEE	–	initial environmental examination
LIBOR	–	London interbank offered rate
MFF	–	multitranches financing facility
NRW	–	nonrevenue water
O&M	–	operation and maintenance
OCR	–	ordinary capital resources
PFR	–	periodic financing request
PMU	–	project management unit
SAWACO	–	Saigon Water Corporation
WSC	–	water supply company

## NOTES

- (i) The fiscal year of the Socialist Republic of Viet Nam and its agencies ends on 31 December.
- (ii) In this report, "\$" refers to US dollars.

<b>Vice-President</b>	S. Groff, Operations 2
<b>Director General</b>	J. Nugent, Southeast Asia Department (SERD)
<b>Director</b>	T. Gallego-Lizon, Director, Urban Development and Water Division, SERD Eric Sidgwick, Country Director, SERD
<b>Team leader</b>	H. Jenny, Principal Urban Development Specialist, SERD
<b>Team members</b>	L. Adams, Senior Social Development Specialist, SERD T. Culla, Associate Social Development Officer, SERD V. T. Dien, Senior Programs Officer, SERD N. My Binh, Senior Portfolio Management Officer, SERD N. T. Giang, Social Development Officer (Gender), SERD B. Konysbayev, Principal Counsel, Office of the General Counsel S. Kotagiri, Social Development Specialist, EATC N. N. Thuy, Operations Assistant, SERD A. Fox, Principal Procurement Specialist, Office of Services and Financial Management Department S. C. Sandhu, Senior Advisor to the Vice-President, VPKM S. Schapero, Senior Financial Specialist, SERD A. Senador, Operations Assistant, SERD
<b>Peer reviewer</b>	A. Baird, Senior Water Supply and Sanitation Specialist, Regional Sustainable Development Department

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

## CONTENTS

	<b>Page</b>
TRANCHE AT A GLANCE	
I. BACKGROUND	1
II. ASSESSMENT OF IMPLEMENTATION	1
III. PERIODIC FINANCING REQUEST	4
A. Impact and Outcome	4
B. Outputs	4
C. Investment and Financing Plans	4
D. Implementation Arrangements	6
E. Project Readiness	6
F. Advance Contracting and Retroactive Financing	7
IV. DUE DILIGENCE	7
A. Technical	7
B. Economic and Financial	7
C. Governance	8
D. Poverty, Social, and Gender Dimensions	8
E. Safeguards	9
F. Risks and Mitigating Measures	9
G. Risk Categorization	10
V. ASSURANCES	10
VI. RECOMMENDATION	10
APPENDIXES	
1. Design and Monitoring Framework for Project 4	
2. Loan Agreement	
3. Project Agreement	
4. Periodic Financing Request for Project 4	
5. Project Administration Manual for Project 4	
6. Updated Contribution to the ADB Results Framework	
7. Economic and Financial Assessments for Project 4	
8. Updated Summary of Poverty Reduction and Social Strategy	
9. Safeguard Reports (Environment and Resettlement)	
10. Gender Action Plan	
11. Risk Assessment and Risk Management Plan	
12. Client Feasibility Studies and Engineering Designs	
13. Ha Noi Water Sector Assessment (2014)	
SUPPLEMENTARY APPENDICES	
A. Financial Management Assessment (Project 4)	
B. Procurement Capacity Assessment Report and Recommendations (Project 4)	
C. Climate Change Screening AWARE (Project 4)	

## TRANCHE AT A GLANCE

<b>1. Basic Data</b>		<b>Project Number:</b> 41456-044	
<b>Project Name</b>	Water Sector Investment Program PFR4	<b>Department /Division</b>	SERD/SEUW
<b>Country Borrower</b>	Viet Nam, Socialist Republic of Socialist Republic of Viet Nam	<b>Executing Agency</b>	Ministry of Planning and Investment
<b>2. Sector</b>	<b>Subsector(s)</b>	<b>ADB Financing (\$ million)</b>	
✓ Water and other urban infrastructure and services	Urban water supply		205.00
		<b>Total</b>	<b>205.00</b>
<b>3. Strategic Agenda</b>	<b>Subcomponents</b>	<b>Climate Change Information</b>	
Inclusive economic growth (IEG) Environmentally sustainable growth (ESG)	Pillar 2: Access to economic opportunities, including jobs, made more inclusive Urban environmental improvement	Climate Change impact on the Project	High
<b>4. Drivers of Change</b>	<b>Components</b>	<b>Gender Equity and Mainstreaming</b>	
Governance and capacity development (GCD) Private sector development (PSD)	Institutional development  Conducive policy and institutional environment	Effective gender mainstreaming (EGM)	✓
<b>5. Poverty Targeting</b>		<b>Location Impact</b>	
Project directly targets poverty	No	Urban	High
<b>6. Risk Categorization:</b>	Complex		
<b>7. Safeguard Categorization</b>	Environment: B Involuntary Resettlement: B Indigenous Peoples: C		
<b>8. Financing</b>			
<b>Modality and Sources</b>		<b>Amount (\$ million)</b>	
<b>ADB</b>		<b>205.00</b>	
Sovereign MFF-Tranche (Loan): Ordinary capital resources		205.00	
<b>Cofinancing</b>		<b>0.00</b>	
None		0.00	
<b>Counterpart</b>		<b>30.00</b>	
Government		30.00	
<b>Total</b>		<b>235.00</b>	
<b>9. Effective Development Cooperation</b>			
Use of country procurement systems		No	
Use of country public financial management systems		No	

## TRANCHE AT A GLANCE

Date of Receipt by ADB of PFR: 26 October 2015

Tranche Number: 4

### 10. Country Operations Business Plan

**CPS**

<http://www.adb.org/documents/viet-nam-country-partnership-strategy-2012-2015>

**COBP**

<http://www.adb.org/sites/default/files/institutional-document/152082/cobp-vie-2015-2017.pdf>

### 11. Tranche Summary

The proposed Project 4 to Hanoi Water Company Limited (HAWACOM) will improve water services for 3 million people, and provide piped water connections for 740,000 people for the first time, including about 23,000 poor. The Ministry of Planning and Investment is the coordinating agency for the MFF. HAWACOM is the project owner and implementing agency for Project 4, while the executing agency is the Ha Noi Peoples Committee.

**Impact:** Aligned with Prime Minister Decision 1929/2009 (Viet Nam Orientation Plan for Water Supply to 2025): Water supply development for urban and industrial areas to contribute to industrialization and urbanization of the country

**Outcome:** Improved efficiency of HAWACOM.

**Outputs:** (i) Increased water supply coverage in Ha Noi, (ii) Improved business planning, asset management and financial management of HAWACOM, and (iii) Effective non revenue water reduction in Ha Noi.

**Implementation Arrangements:** Ministry of Planning and Investment will be the executing agency.

**Project Readiness:** As part of the feasibility study report, HAWACOM has completed the basic design for Project 4, which has been reviewed by the Ministry of Construction. At loan fact finding, HAWACOM agreed to finance, under counterpart funding, consulting services for the detailed engineering design and preparation of bidding documents for package CW1. HAWACOM will also initiate advance action in 2015 for the recruitment of the detailed design and supervision consultant for package CS1.

### 12. Significant Developments in the MFF and Previous Tranches

On 22 February 2011, ADB approved the provision of OCR loans under a 10-year multitranches financing facility (MFF) for the Water Sector Investment Program for an aggregate amount not exceeding \$1 billion. The MFF will benefit 15 million people with improved service, including 500,000 poor people, which will be connected to piped water networks for the first time. The MFF is designed to finance the sustainable provision of water in Viet Nam and improve the efficiency of the water supply companies (WSCs).

On 22 February 2011, ADB approved a \$138 million loan for Project 1 to the Saigon Water Corporation (SAWACO), which was made effective on 24 May 2012. In 2014, SAWACO recruited two consultancy firms for design and construction supervision and project management. With the award of two large civil works contracts and 4 smaller contracts in 2015/2016, cumulative contract awards are expected to reach 76% of the loan amount by 2016. The loan is currently rated Actual Problem, due to initial delays in contract awards and associated slow disbursements, but these are expected to accelerate in 2016.

On 7 December 2012, ADB approved a loan for Project 2 for a value of \$212 million, which was declared effective on 18 September 2013. The loan was designed to finance physical investment in 6 WSCs and detailed design and preparation of bidding documents for investment in nine WSCs with proposed financing in Project 3. In 2015, all WSCs have set-up a PMU with a full-time director; 12 WSCs will have completed the recruitment of consultants for detailed design and preparation of bid documents and 1 further WSC will achieve this in early 2016; disbursement at 15 December 2015 is over \$12 million and contract award over \$13 million. The loan is rated On Track.

On 27 March 2015, ADB approved a loan for Project 3 for \$142.50 million. Loan 3251 was signed on 19 November 2015, to finance investments in seven WSCs. The loan is expected to be effective in early 2016, with a rapid start up, given advance preparatory work under Project 2. Given the parallel nature of operations, implementation delays in projects 1 to 3 will not affect Project 4, which will engage with a new separate WSC.

To date, Projects 1, 2, and 3 are compliant with the framework financing agreement undertakings and loan covenants, including contractual provisions, governance and gender, and safeguards compliance. Project 1 addresses any unanticipated resettlement impacts from pipe installation that may arise during implementation through the resettlement framework. Safeguard issues under Project 2 have been duly addressed through the preparation of six resettlement plans. Implementation of environmental safeguards has been satisfactory in previous projects and no corrective actions are pending.

### 13. Milestones

**Estimated Approval**  
1 December 2015

**Estimated Effectiveness**  
30 March 2016

**Estimated Completion<sup>a</sup>**  
31 December 2020

### 14. Linked Documents

	Required Document	Disclosure Date
(i) Environment	IEE - Initial Environment Examination	6 October 2015
Weblink:	<a href="http://www.adb.org/projects/documents/vie-wsip-t4-water-supply-system-expansion-west-of-ha-no-i-jun-2015-iee">http://www.adb.org/projects/documents/vie-wsip-t4-water-supply-system-expansion-west-of-ha-no-i-jun-2015-iee</a>	
(ii) Involuntary resettlement	RP - Resettlement Plan	6 October 2015
Weblink:	<a href="http://www.adb.org/projects/documents/vie-wsip-t4-water-supply-system-expansion-west-of-ha-no-i-mar-2015-rp">http://www.adb.org/projects/documents/vie-wsip-t4-water-supply-system-expansion-west-of-ha-no-i-mar-2015-rp</a>	
(iii) Indigenous peoples		

## I. BACKGROUND

1. On 22 February 2011, the Asian Development Bank (ADB) approved the provision of ordinary capital resources (OCR) loans under a 10-year multitranche financing facility (MFF) for the Socialist Republic of Viet Nam's Water Sector Investment Program for an aggregate amount not to exceed \$1 billion.<sup>1</sup> This was the first time Viet Nam borrowed OCR for its water sector. The MFF will benefit 15 million people, including 500,000 poor people, with new and/or improved service, which will be connected to piped water networks for the first time. The MFF is designed to finance the sustainable provision of water in Viet Nam and improve the efficiency of the water supply companies (WSCs).

2. While 98% of Viet Nam's urban population has access to improved water sources (exceeding Target 7c of the Millennium Development Goals), only 61% have a household connection.<sup>2</sup> The remaining urban population (37%) is dependent on shared stand posts or protected wells.<sup>3</sup> Of the country's 774 towns and urban settlements, only one-third has any form of piped water system, but this serves 77% of the total urban population.<sup>4</sup> The MFF addresses significant gaps in service reliability by providing access to finance for operational improvement and increased coverage. The MFF enables WSCs to borrow for capital investment, securing their debt through water tariff increases.

3. On 26 October 2015, ADB received a periodic financing request (PFR) from the State Bank of Viet Nam for Project 4 of \$205 million to finance investments for Hanoi Water Company Limited (HAWACOM).<sup>5</sup> The investment is consistent with the overall objectives of the MFF. It will improve water services for 3 million people, and provide 740,000 people, including about 23,000 poor people, with a piped water connection for the first time.

## II. ASSESSMENT OF IMPLEMENTATION

4. Under the three PFRs formerly approved for this MFF, fourteen WSCs borrowed a combined amount of \$492.50 million to finance system improvements and increase coverage for 6.7 million people, including 55,000 poor households that will receive piped water connections for the first time.<sup>6</sup>

5. **Physical and Nonphysical Progress.** On 22 February 2011, ADB approved a \$138 million loan for Project 1 to the Saigon Water Corporation (SAWACO). Loan 2754 became effective on 24 May 2012. SAWACO set up a gender-balanced project management unit (PMU) with a full-time director and 20 full-time staff, in line with the requirements in the gender action plan (GAP). In 2014, SAWACO recruited two consultancy firms for design and construction supervision and project management. Delays in the recruitment of consultants led to delays in contract awards, which are now in progress, including two large civil works contracts and two

---

<sup>1</sup> ADB. 2011. *Report and Recommendation of the President to the Board of Directors. Proposed Multitranche Financing Facility to the Socialist Republic of Viet Nam for the Water Sector Investment Program*. Manila (MFF0054-VIE). The associated framework financing agreement (FFA) was signed on 5 May 2011. Overall investment requirements under the roadmap were estimated at \$2.78 billion equivalent.

<sup>2</sup> ADB. 2014. *Key Indicators for Asia and the Pacific*, Manila; World Health Organization and United Nations Children's Fund. 2014. *Joint Monitoring Programme for Water and Sanitation 2014*. New York. 2012 data.

<sup>3</sup> Compared with similarly designated "other improved sources" figures of 55% for Indonesia, 27% for the Philippines, and 15% for Thailand.

<sup>4</sup> Benchmarking data from the Ministry of Construction.

<sup>5</sup> Based on the draft PFR, ADB fielded a due diligence mission in July 2015 which concluded with the signing of a memorandum of understanding for loan fact finding on 31 July 2015.

<sup>6</sup> Ho Chi Minh City is included in PFR1; six WSCs in PFR2 from the provinces of Binh Duong, Dak Lak, Quang Tri, Thua Thien Hue and the cities of Da Nang and Hai Phong; and seven WSCs in PFR3 from Bac Giang City, Cua Lo Town, Nghi Son Economic Zone, Quang Nam Province, Thai Hoa Town, Thai Nguyen City, and Vinh City.

smaller contracts. In 2015, cumulative contract awards are 50% of the loan amount and in early 2016 are expected to reach approximately 76%. The loan is currently rated an 'Actual Problem',<sup>7</sup> due to the initial delays in contract awards and associated slow disbursements,<sup>8</sup> and contractual problems post-award, but the process is expected to accelerate in 2016.

6. On 7 December 2012, ADB approved a loan for Project 2 for a value of \$212 million. Loan 2961 was declared effective on 18 September 2013. Project 2 was designed to finance physical investment in six WSCs and detailed design and bidding documents in nine WSCs, with proposed financing in Project 3.<sup>9</sup> In 2015, all WSCs have set up a PMU with a full-time director; 12 WSCs have completed recruiting consultants for detailed design and preparation of bid documents and the remaining ones will do so by early 2016. The process of detailed design and bidding is underway in several WSCs. One civil works contract package was awarded in 2015 with other three packages, estimated to over \$30 million to be awarded in the first quarter of 2016. The loan is rated 'On Track' as per 2015 performance validation.<sup>10</sup>

7. On 27 March 2015, ADB approved a loan for Project 3 for \$142.50 million. Loan 3251 was signed on 19 November 2015, to finance investments in seven WSCs. The loan is expected to be effective in early 2016, with a rapid start up, given advance preparatory work under Project 2. Given the parallel nature of operations, implementation delays in projects 1 to 3 will not affect Project 4, which will engage with a new and separate WSC.

**8. Compliance with Legal Agreements and Framework Financing Agreement Undertakings.** To date, Projects 1, 2, and 3 are compliant with the framework financing agreement (FFA) undertakings and loan covenants, including contractual provisions, governance and gender, and safeguards compliance. Project 1 addresses any unanticipated resettlement impacts from pipe installation that may arise during implementation through the resettlement framework. Safeguard issues under Project 2 have been duly addressed through the preparation of six resettlement plans.<sup>11</sup> The safeguard documents, including resettlement plans, initial environmental examination (IEE) reports, and environmental management plans (EMPs) have been included in all bidding documents issued. Implementation of environmental safeguards has been satisfactory in previous projects and no corrective actions are pending.

**9. Status of Roadmap, Policy Framework, and Investment Program.** The Water Sector Investment Program's roadmap and policy framework were developed to support water sector objectives under the government's Socioeconomic Plan (2006–2010). The plan sought (i) to provide essential water supply and sanitation infrastructure to poor households in cities and towns across the country, and (ii) to enhance cost recovery from infrastructure investments by setting and collecting appropriate tariffs and fees. The program remains relevant and consistent with the objectives of Viet Nam's current Socioeconomic Development Plan (2011–2015), including the need (i) to identify water as a limiting factor for growth, and (ii) to improve the quality of life and health by providing safe water. The MFF and its projects are consistent with

<sup>7</sup> As the first OCR loan to the water sector in Viet Nam that was relented by the government in foreign currency to WSCs, additional guidance from the prime minister was necessary, leading to initial start-up delays. The loan closing date has therefore been extended by 2 years, to 30 June 2018.

<sup>8</sup> Disbursement at 15 December 2015 is \$4 million and contract award \$68 million.

<sup>9</sup> Two WSCs have since withdrawn from Project 2, having secured financing from private and commercial sources.

<sup>10</sup> Disbursement at 15 December 2015 is over \$12 million and contract award over \$13 million.

<sup>11</sup> Three resettlement plans for Hai Phong, one each for Quang Tri, Hue, and Buon Ma Thuot. Three WSCs have completed their detailed designs so far and findings reveal that (i) Binh Duong WSC will not face any resettlement issues, as pipe construction is in the right of way of roads; (ii) Hue WSC updated the measurement surveys and issued a resettlement due diligence report for project components under counterpart funding; and (iii) Dak Lak WSC has updated the resettlement plan and started land clearance.



ADB's Water Operational Plan 2011–2020.<sup>12</sup> The investment program for the MFF remains largely unchanged, but its conversion is expected to be effected in five loans instead of four. Project 4 is aligned to the MFF's policy framework, and associated investments have been included in the country partnership strategy for Viet Nam, 2012–2015. The MFF's design and monitoring framework (DMF) was updated in 2015 to align it with ADB's updated DMF guidelines and the impact has been redefined to support Decision 1929/2009.<sup>13</sup>

10. Projects 1 to 3 have also been instrumental in assisting the government to (i) enforce operation on a full-cost recovery basis with matching water tariff revenues, (ii) corporatize the water companies, and (iii) implement key legislation and plans in the water sector to extend water coverage (Decision 1929/2009) and reduce nonrevenue water (NRW) (Decision 2147/2010) (footnote 13). These are summarized in Table 1.

**Table 1: MFF Policy Implementation Assistance**

Policy Objective	Status
Progressive full-cost recovery from tariffs	<p>1. Before approval of the MFF, water tariff increases by WSCs were uncommon and less than 5% every 2 to 3 years, even when affordability was not an issue (Appendix 8). This compromised sustainability. The MFF has been a major instrument of change.</p> <p>2. Under Project 1, SAWACO's average water tariff more than doubled between 2008 and 2014 (from D4,605/cubic meters [m<sup>3</sup>] to D9,662/m<sup>3</sup>), and a new water tariff roadmap (2016–2020) is expected to be approved by April 2016..</p> <p>3. Under projects 2 and 3, all 13 WSCs have adopted volumetric tariffs. Water tariff increases between 50% and 100% are noted since 2008 in all participating WSCs (from average tariffs below D4,000 to values ranging between D6,000 and D9,400/m<sup>3</sup>).</p> <p>4. Bill collection efficiency is high in Viet Nam (over 97%). Financing ratios show that all WSCs are now cash-flow positive and profitable under Vietnamese accounting standards.</p> <p>5. The MFF has also enforced pro-poor initiatives: connection costs are included in tariffs, removing barriers to access to service, and lifeline tariffs are enforced.</p>
Corporatization of the water companies—regulation and governance	<p>The MFF supports the government's efforts to equitize water companies to operate under enterprise law with autonomous management and filing of financial audited statements. Since 2012, all WSCs have already been equitized<sup>14</sup> to one member limited companies. By 2020, the WSCs will become joint stock companies, allowing majority private ownership. The corporatization of the WSCs strengthens the need for adequate regulation and governance. ADB is providing technical assistance to implement service contracts with agreed operational improvement milestones and targets against water tariff increase.</p>
Increased coverage	<p>By 2020, piped water service will be extended to 6.7 million people, including 55,000 poor households. Water supply capacity will increase by 576,000 m<sup>3</sup> per day.</p>
Non-revenue water reduction	<p>By 2020, 10 out of 14 participating WSCs will achieve the NRW reduction target of 18%, (10 are expected to even achieve the 2025 government target of 15%), while the remaining 4 will achieve the secondary target of reducing NRW by 1% per annum.</p>

11. **Lessons Learned.** Lessons identified from the implementation of previous tranches include: (i) project readiness needs to be pursued early in the project, and maintained after loan processing; (ii) repackaging into larger contracts may result in more competitive awards to better qualified contractors; and (iii) land acquisition and resettlement should be pursued early.

<sup>12</sup> ADB. 2011. *Water Operational Plan 2011–2020*. Manila.

<sup>13</sup> Three legislations underpin the vision to sustain a strong water policy framework: (i) Decree 117/2007 “clean water production, supply, and consumption”, supplemented by Decree 124/2011, requiring WSCs to operate on full-cost recovery, to support financial sustainability (MFF Output 2); (ii) Decision 1929/2009 on Orientation Plan for water supply to 2025 with vision 2050, detailing the requirements to support increased coverage (MFF Output 1); and (iii) Decision 2147/2010 “Approval of National Unaccounted-for-Water and NRW Program to 2025”, which set targets for NRW reduction from 26% in 2014 to 18% by 2020, to support effective NRW reduction (MFF Output 3).

<sup>14</sup> A privatization process under Decision No. 38/2007, in which state-owned water companies are incorporated into a one member limited company (one share owned by the Peoples Committee) or a joint stock company with shares.

### III. PERIODIC FINANCING REQUEST

#### A. Impact and Outcome

12. Consistent with the new MFF DMF objectives, the impact of Project 4 is aligned with 'Water supply development orientation for urban and industrial areas to contribute to industrialization and urbanization of the country (Viet Nam Orientation Plan for Water Supply to 2025, 2009)'. The outcome will be improved efficiency of HAWACOM.

#### B. Outputs

13. The outputs of Project 4 are (i) increased water supply coverage in Ha Noi; (ii) improved business planning, financial management, and asset management of HAWACOM; and (iii) effective NRW reduction in Ha Noi. The outputs of Project 4 are consistent with the outputs of the MFF.

14. Output 1 will increase coverage through the expansion of the water supply distribution system to the western part of Ha Noi in 33 communes and one town. The scope of works includes: (i) about 1,500 kilometers of pipelines installed; (ii) one pumping station constructed; and (iii) about 100,000 water meters, 65 flowmeters, and 600 fire hydrants installed.

15. Output 2 will (i) conduct training on operational improvement, (ii) upgrade the central laboratory for water quality analysis, and (iii) supply and install a new operation center for information communication technology (ICT) consisting of a supervisory center and data acquisition and geographic information systems. These initiatives will lead to better planning and improve responsiveness and preparedness to tackle climate change impacts.

16. Output 3 will (i) promote proactive leakage detection, (ii) prepare a hydraulic model of the distribution system, and (iii) improve energy efficiency using the operation center for ICT newly financed under Project 4.

17. **Special features of Project 4** include (i) a new service model, which coordinates water distribution (by HAWACOM) with two private operators<sup>15</sup> responsible for water production plants; and (ii) active engagement with the Ha Noi Peoples' Committee (HPC) to restructure the water sector in Ha Noi (currently done by seven WSCs), through institutional assistance (consultancy package CS1) and the use of ICT (package CW3).

#### C. Investment and Financing Plans

18. The project is estimated to cost \$235.00 million (Table 2). The government has requested a loan of \$205 million from ADB's OCR to help finance the project.<sup>16</sup> The loan will have a 25-year term, including a grace period of 6 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 (the interest and other charges during construction to be capitalized in the loan); and such other terms and conditions set forth in the draft loan and project agreements. Based on the above loan terms and straight repayment option, the average loan maturity is 15.75 years and the maturity premium payable to ADB is 0.10% annually. The government has provided ADB with (i) the reasons for its decision to borrow under ADB's LIBOR-based lending facility based on these terms and conditions, and (ii) an undertaking that

<sup>15</sup> VIWASUPCO BOO, a joint venture between Vinaconex Joint Stock Company (JSC), Viet Nam and Acuatico Private Ltd., Singapore; and Red River Surface Water Treatment Plant JSC, Viet Nam, a joint venture between Thang Long JSC, Viet Nam, and HAWACOM.

<sup>16</sup> Local transportation and insurance may be financed by the ADB loan.

these choices were its own independent decision and not made in reliance on any communication or advice from ADB.

**Table 2: Project Investment Plan (Project 4) (\$ million)**

Item	Amount <sup>a</sup>
<b>A. Base Cost<sup>b</sup></b>	
1. Water supply expansion (Output 1)	161.72
2. Operational improvement (outputs 2 & 3)	5.91
3. Land and resettlement	0.25
4. Consulting services	18.85
5. Project management unit	4.61
<b>Subtotal (A)</b>	<b>191.34</b>
<b>B. Contingencies<sup>c</sup></b>	
1. Physical contingencies	20.21
2. Price contingencies	6.74
<b>Subtotal (B)</b>	<b>26.95</b>
<b>C. Financing Charges During Implementation<sup>d</sup></b>	
1. Interest during construction	15.84
2. Commitment charges	0.87
<b>Subtotal (C)</b>	<b>16.71</b>
<b>Total (A+B+C)</b>	<b>235.00</b>

<sup>a</sup> Includes taxes and duties of \$21.72 million financed from government resources through cash contribution.

<sup>b</sup> In mid-2015 prices.

<sup>c</sup> Physical contingencies computed at 10% for civil works and consulting services. Price contingencies computed at 0.95% on foreign exchange costs and 2.37% on local currency costs; it includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate. The inflation factors used to estimate the price contingencies are 1.5% in 2016, 1.4% in 2017, 1.5% in 2018, 1.5% in 2019 and 1.5% in 2020 for international components, and 4.0% in 2016, 5.0% in 2017 and thereafter to 2020 for local components.

<sup>d</sup> Includes interest and commitment charges. Interest during construction for ADB loan(s) has been computed at the 5-year USD fixed swap rate plus a spread of 0.50% and a maturity premium of 0.10%. Commitment charges are 0.15% per year to be charged on the undisbursed loan amount.

Source: ADB Project Team.

19. The financing plan is in Table 3. The loan will be extended to the Government of Viet Nam and loan proceeds will be relent to HAWACOM, according to the terms and conditions for official development assistance in Decree 78/2010/ND-CP, through a subsidiary loan agreement, signed with the Ministry of Finance. The remaining cost, \$30.00 million equivalent, will be financed under counterpart funds to cover taxes and duties in full, commitment charges and safeguards costs in part, and project incremental costs. The physical contingencies are set at 10% of base costs. Interest and commitment charges will be capitalized under the loan.

**Table 3: Financing Plan (Project 4)**

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank	205.00	87.00
Government	30.00	13.00
<b>Total</b>	<b>235.00</b>	<b>100.00</b>

Source: ADB Project Team.

## D. Implementation Arrangements

20. The Foreign Economic Relations Department, MPI, is the coordinating agency for the overall MFF and Project 4. The coordinating agency is responsible for (i) short-listing future local governments and WSCs that want to access the MFF; submitting the list to ADB during its country programming mission; and updating this list, if needed, at its country programming confirmation mission; and (ii) preparing consolidated reports with the assistance of the WSCs.

21. Under Project 4, management is delegated to HAWACOM, as the project owner, and HPC, as the executing agency, as per Decree 38/2013/ND-CP. HAWACOM will set up a project management unit (PMU) within its organizational structure for project implementation, with at least 30% women staff. The implementation arrangements are summarized in Table 4 and described in detail in the project administration manual for Project 4 (Appendix 5).

**Table 4: Implementation Arrangements (Project 4)**

Aspects	Arrangements		
Implementation period	July 2016–December 2020		
Estimated completion date	31 December 2020 (loan closing date 30 June 2021)		
Management			
(i) Oversight body (Coordinating agency)	Ministry of Planning and Investment Director General Foreign Economics Relation Department		
(ii) Project executing agency	Ha Noi Peoples' Committee (HPC)		
(iii) Key implementing agency (project owner)	Ha Noi Water One Member Limited Company (HAWACOM)		
Procurement	International competitive bidding	4 contracts	\$168.73 million
Consulting services	QCBS	1 contract	\$19.32 million
	LCS	1 contract	\$0.23 million
Retroactive financing	Up to \$20.5 million to finance civil works and consulting services incurred before loan effectiveness, but not more than 12 months before loan agreement signing date.		
Disbursement	The loan proceeds will be disbursed following ADB's <i>Loan Disbursement Handbook</i> (2015, as amended from time to time) and detailed arrangements agreed upon between the government and ADB.		

ADB = Asian Development Bank; LCS = least cost selection; QCBS = quality- and cost-based selection.

All procurement of goods and works will be according to ADB's Procurement Guidelines (2015, as amended from time to time). All consulting services will be recruited according to ADB's Guidelines on the Use of Consultants (2013, as amended from time to time).

Source: ADB Project Team.

## E. Project Readiness

22. As part of the feasibility study report, HAWACOM has completed the basic design for Project 4, which the Ministry of Construction reviewed. HPC approved the feasibility study report on 7 October 2015.

23. Implementation of previous projects has highlighted the need to incorporate advance action to fast-track implementation, authorized in Viet Nam only in 2013.<sup>17</sup> At loan fact finding, HAWACOM agreed to finance consulting services, under counterpart funding, for the detailed engineering design and preparation of bidding documents for package CW1. HAWACOM also initiated advance action in October 2015 to recruit the detailed engineering design and supervision consultant for package CS1. It is expected that 40% of the loan will be ready for bidding before loan effectiveness.

<sup>17</sup> Decree 38/2013/ND-CP. *Management and Utilization of Official Development Assistance and Concessional Loans from Donors*. Viet Nam.

## F. Advance Contracting and Retroactive Financing

24. In line with provisions in the FFA, advance contracting and retroactive financing of up to 10% of the proposed loan for eligible expenditures incurred before loan effectiveness, but not more than 12 months before the loan agreement signing date, is to be applied under Project 4. The government was advised that ADB's approval of the advance contracting and retroactive financing does not constitute a commitment to finance the ensuing project.

## IV. DUE DILIGENCE

### A. Technical

25. With support from TA 8357,<sup>18</sup> HAWACOM has agreed to implement a road map for operational improvements, focusing on the implementation of a water safety plan (which will be supported by the upgraded central laboratory facilities for water analysis), NRW reduction, and institutional strengthening of the water sector in Ha Noi (through consultancy inputs and ICT).

26. Small-diameter pipes (up to 300 mm) used in Project 4 will be made of high-density polyethylene, widely available in Viet Nam. Larger-diameter pipes (from 300 to 1,200 mm) would be ductile iron type, supplied from overseas. Two work contracts for pipe installation (packages CW1 and CW2) will be based on bills of quantities prepared during the detailed design; two other contracts (package CW3 for information technology and NRW reduction and package CW4 for the construction of the booster pumping station) will be based on engineering procurement construction, these all will follow ADB's standard bidding documents.

### B. Economic and Financial

27. **Financial Analysis.** Project 4 is financially viable and sustainable based on the methodology for financial analysis prescribed under ADB's Operation Manual G2: Financial Management, Cost Estimates, Financial Analysis, and Financial Performance Indicators (2014). HPC carries the foreign exchange risk through a letter of guarantee to the Ministry of Finance, as part of the subsidiary loan agreement. The water tariffs approved in 2013 are sufficient to finance the project components and for HAWACOM to be cash-flow positive, build cash reserves, and phase out subsidies from HPC. As required under the FFA, HAWACOM will operate on a full-cost recovery basis after the 6-year grace period, and comply with the methodology for calculating the water tariff.<sup>19</sup> HAWACOM increases the water tariff, currently set at about \$0.40 per cubic meter, every 2 years. The financial internal rate of return (FIRR) is 6.8%, with a weighted average cost of capital of 1.54%. The sensitivity analyses were based on a 10% increase in capital; 10% increase in operation and maintenance (O&M) cost; 10% decrease in revenue; 10% increase in capital and O&M cost, with a 10% decrease in revenue; and a 2-year project delay, with a 20% increase in O&M cost. The FIRR remains robust and varies between 1.91% and 6.0%, when considering standard sensitivities. Advance action taken by HAWACOM to prepare about 40% of the loan for bidding before loan effectiveness is mitigating this risk.

28. **Economic Analysis.** On least-cost analysis, the economic internal rate of return (EIRR), conservatively calculated, is 15.4%, when compared with the economic opportunity cost of capital of 12%. This indicates that Project 4 is financially and economically viable. The EIRR is more sensitive to a decrease in economic benefits than to an increase in investment or O&M costs. If the investment or O&M cost is about 30% higher, or benefits are 15.8% lower than in

<sup>18</sup> ADB. 2013. *Technical Assistance to Viet Nam for Improving the Performance of the Water Supply Sector*. Manila (TA8357-VIE).

<sup>19</sup> The methodology to calculate the water tariff is based on Intercircular 75/2012 (Ministry of Finance, Ministry of Construction, and Ministry of Agriculture and Rural Development).

the base case, the EIRR will fall below 12%. This is also the case if, simultaneously, costs are 10% higher and benefits 10% lower than expected.

29. Because of HAWACOM's improved financial sustainability, due to tariff increases in 2013 as a precondition for ADB to consider the project under the MFF, the private sector has renewed its interest in the water sector. This interest has resulted in (i) HPC's approval of a proposed water production plant on the Red River under direct investment; and (ii) the proposed doubling of production capacity by 2020 of a second water plant to be operated on a build-own-operate basis.

### **C. Governance**

30. HAWACOM is equitized. As such, HAWACOM is managed autonomously and produces its own financial statements following Vietnamese accounting standards. There is no independent regulation; the regulatory function is performed by HPC, the executive branch of the local government, and the WSC owner, with oversight from the Peoples' Council (legislative branch). As a prerequisite for loan negotiations, HAWACOM has (i) presented a water tariff increase road map, and (ii) increased water tariffs in the past 2 years. A financial management assessment was undertaken as part of due diligence, confirming that project financial management arrangements are adequate. The PMU staff will be trained in procurement, disbursement, and safeguards under capacity development programs provided by ADB and the government.

31. ADB's Anticorruption Policy, 1998 (as amended to date), was explained to and discussed with the government, HPC, the executing agency, and HAWACOM, project owner during the loan fact-finding mission. The specific policy requirements and supplementary measures are described in the project administration manual (Appendix 4).

### **D. Poverty, Social, and Gender Dimensions**

32. A poverty, social, and gender assessment was conducted during project preparation to determine the socioeconomic characteristics, needs, and priorities to increase participation of project area beneficiaries and measures in order to mitigate potential risks or negative impacts to the population. A summary poverty reduction and social strategy, GAP, stakeholder communication strategy, and a participation plan were prepared. The project should have significant positive impacts by expanding safe and more reliable water service to new areas and substantially reducing water costs for households without access to piped water. The key poverty and socially inclusive design features of Project 4 include (i) a pro-poor water tariff structure comprising a subsidized "lifeline" quota that will be updated every 2 years; and (ii) free connections for every household.

33. Based on the gender analysis and proposed actions, Project 4 is a gender mainstreaming category II project—effective gender mainstreaming. A GAP was prepared to promote gender equality: (i) 30% female targets for new recruits in PMU staffing; (ii) 50% female staff training on water supply management and O&M; (iii) promotion of affordable and gender-sensitive water tariff pricing policies through female representation in decision-making forums;<sup>21</sup> (iv) gender-inclusive monitoring, evaluation, and reporting with sex-disaggregated data in project performance management information systems; and (v) provision of a full-time national social development specialist in the PMU and one gender specialist to develop its capacity. The GAP is implemented through the supervision consultant and the PMU.

---

<sup>21</sup> Ha Noi Peoples Council, reviewing water tariff proposal, has a policy of at least 30% female representation.

## **E. Safeguards**

34. An environmental assessment review framework, involuntary resettlement framework, and indigenous peoples planning framework were approved under the MFF. Safeguard documents for Project 4 have been prepared according to government regulations and ADB's Safeguard Policy Statement (2009), and local communities and authorities have been consulted. All safeguard documents are endorsed by HAWACOM and disclosed on ADB's website. Hard copies are available at the district offices in the project area. A grievance redress mechanism has been developed under Project 4. The PMU has the capacity to implement the safeguards and will prepare semiannual monitoring reports to be submitted to ADB.

35. Project 4 is categorized B for environment, as environmental impacts are not irreversible and primarily relate to construction works. These would be mitigated through the EMP, covering design, construction, and operations phases. Climate resilience measures have been integrated into the project, primarily pertaining to site preparation. The final EMP will form part of the contract documents. An IEE report was prepared and will be updated in the detailed design.

36. An initial climate risk screening exercise assessed Project 4 as high risk for climate change impacts by 2050, due to the risk of flooding, landslides, and onshore category 1 storms and typhoons.<sup>22</sup> Climate change and natural hazard considerations have been incorporated into the IEE report, with specific measures recommended for integration at engineering design stages, whenever appropriate. The risk and type of flooding is dependent on local geographical factors, including proximity to the inland watercourses, topography, and the state of drainage infrastructures. Landslides are not an issue since the project area is flat.

37. Project 4 is categorized B for involuntary resettlement because the project is assessed to have limited involuntary resettlement impacts. The project will acquire permanently 5,459 square meters of land. Twenty-eight households (121 affected people) and one organization (Song Dong commune peoples committee building) will be affected. Fifteen households will be severely affected, with loss of more than 10% of their productive assets, and 13 households will be partially affected. All unanticipated impacts will be mitigated in accordance with the MFF resettlement framework. About 70 hectares of land along transmission pipelines will be acquired temporarily during construction. These temporary resettlement impacts will be included in the updated resettlement plan. The resettlement plan will be updated and disclosed after the detailed design and cleared by ADB prior to contract awards. Effective monitoring at all stages of project implementation will be ensured by submitting semiannual internal reports. All the costs for land acquisition and resettlement will be from counterpart funds.

38. Project 4 is categorized C for indigenous peoples. Due diligence confirmed that there are no ethnic minorities in the project area who may be considered indigenous peoples based on ADB's Safeguard Policy Statement.

## **F. Risks and Mitigating Measures**

39. Project 4 risks are assessed as moderate based on (i) high country risk; (ii) moderate implementation capacity risk; and (iii) low project risk, given low technical complexity. The project's integrated benefits are expected to outweigh costs. Major risks and mitigating measures include the lessons learned from previous tranches and are presented in Table 5 and described in detail in the updated risk assessment and risk management plan (Appendix 11).

---

<sup>22</sup> Under TA 8357 (footnote 18), grant funding, financed under MFF0054-VIE, is provided to assess the effects of climate change on all the participating cities, including Ha Noi, and to proof the design for climate change adaptation and mitigation.

**Table 5: Summary of Risks and Mitigating Measures (Project 4)**

<b>Risks</b>	<b>Mitigating Measures</b>
Weak project implementation, because of insufficient knowledge of ADB systems and procedures.	<b>Training:</b> Although some staff in HAWACOM have experience with official development assistance-financed projects, they will be re-trained in ADB's latest disbursement, procurement, and safeguards.
Project start-up delays reflect late availability of consultant recruitment.	<b>Capacity Development:</b> Advance action will be undertaken, aiming to bid over 30% of the loan prior to effectiveness. Under ADB's technical assistance program (footnote 18), the project team will assist HAWACOM with the recruitment of consultants.
Lack of financial sustainability, because of failure to enforce water tariff increases.	<b>Financial Sustainability:</b> HAWACOM is currently generating positive cash-flows and continues to target full-cost recovery. The water tariff road map and annual audited financial statement will be reviewed to ensure compliance for debt servicing to be covered by water revenues without subsidies by the end of Project 4.

**G. Risk Categorization**

40. Project 4 is assessed as complex because the loan amount is above \$200 million. HAWACOM has experience with lending from the World Bank, the Danish International Development Agency (DANIDA), and Finland. The project is categorized B for environment and resettlement and C for indigenous peoples.

**V. ASSURANCES**

41. The government, HPC and HAWACOM have assured ADB that implementation of the project will conform to all applicable ADB policies including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement as described in detail in the project administration manual and loan documents.

42. The government and HPC have agreed with ADB on certain covenants for the project, which are set forth in the loan agreement and project agreement. HAWACOM will be granted a water tariff increase, to be updated every 2 years, based on the audited financial statements and the latest legislation on methodology for calculating the increase (footnote 19).

43. No disbursements may be made until HAWACOM has (i) set up a PMU in accordance with Vietnamese legislation; and (ii) executed a Subsidiary Loan Agreement on terms and conditions acceptable to ADB.

**VI. RECOMMENDATION**

44. On the basis of the approval by ADB's Board of Directors for the provision of loans under the multitranche financing facility in an aggregate principal amount not exceeding \$1 billion to the Socialist Republic of Viet Nam for the Water Sector Investment Program, it is recommended that the President approve the proposed project, as described in paragraph 18, and such other terms and conditions as are substantially in accordance with those set forth in the draft loan and project agreements for the proposed tranche.