

## DETAILS OF IMPLEMENTATION ARRANGEMENTS

### A. Regulatory Framework or Contractual Structure

1. The Binh Duong Water Environment Joint Stock Company (BIWASE) is the sole supplier of drinking water in Binh Duong province, Viet Nam. The company's main activity is water supply, but it also provides waste management and wastewater treatment and sanitation facility operating services. In 2019, the company's total water production capacity was 311,300 cubic meters per day, its total distribution pipe length was 4,276 kilometers, and there were more than 269,000 connections with a service coverage of 78% of the province's population. BIWASE's water supply service covers all key water demand centers in the province and the company is positioned as a natural monopoly providing essential services to Binh Duong. The asset base of BIWASE is regulated under a decision by the Binh Duong Provincial People's Committee (PPC) at the time of conversion to a joint stock company in 2016. All water supply and waste management assets are essentially in the remit of BIWASE, whereas wastewater treatment assets are excluded and are owned by the Binh Duong PPC.

2. The legal basis of the company's operation consists of four elements:

- (i) BIWASE's business registration certificate was issued on 30 September 2016 (Business code 3700145694). The certificate does not expire and is issued by the Business Registration Bureau under the Department of Planning and Investment of Binh Duong province. It consists of a listing of business activities of the company: water supply activities, repair activities, civil works, consulting, and design activities.
- (ii) The service area is described in a letter dated 30 September 2011 by the Binh Duong PPC to BIWASE. BIWASE acquired all legal titles to the assets and obtained necessary land certificates from the Department of Natural Resources and Environment. The company has As Built Certificates and a License for Exploitation and Use of Surface Water, issued by the Binh Duong PPC. The As Built Certificates are based on Article 18.5 of Decree 43 as issued on 15 May 2014. Such certificates issued by the provincial authority are specified by Decree 43 to be a replacement for land use right certificates.
- (iii) Decree 117 on Clean Water Production, Supply and Consumption, dated 11 July 2007, and subsequent adjustments in Decree 124, which outline in detail the scope and legal and regulatory compliance of services to be delivered by water supply companies.<sup>1</sup>
- (iv) Decree 130 on production and provision of public services (No. 130/2013/ND-CP), which regulates water supply services such that they are to be produced and provided under either a bidding procedure or under direct appointment, if conditions for bids are not met.

3. BIWASE's business and financial sustainability depend on factors largely controlled by the central government: (i) the Ministry of Construction for regulations related to the water industry; (ii) the Ministry of Natural Resources and Environment (MONRE) for water intake appraisal and permission; (iii) the Binh Duong PPC for water tariff roadmap and approval, municipal waste tariff approval, service contracts for wastewater treatment, and sanitation services, and (iv) the public for acceptance of water tariffs. In Viet Nam, the regulations on tariff calculation, water intake

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<sup>1</sup> Decree 117/2007/ND-CP on Clean Water Production, Supply and Consumption, Decision approving orientations for developing water supply in Viet Nam's urban centers and industrial parks up to 2025, and a vision towards 2050 (Decision 1929/2009/QĐ-TTg) and its adjustment (Decision 2502/QĐ-TTg).

permission, and their approval processes are clearly set out. For the proposed project, BIWASE has secured support from MONRE (i.e., raw water intake permission) and the Binh Duong PPC **CONFIDENTIAL INFORMATION DELETED**.

## **B. Management**

4. The general shareholders' meeting (GSM) appoints the board of directors, which consists of seven members including two external members. The board is responsible for overseeing the management's performance to ensure compliance with the policies, plans, and strategies approved by the GSM. **CONFIDENTIAL INFORMATION DELETED**.

## **C. Operations Arrangements**

### **1. Water Supply Business**

5. **Revenue structure.** BIWASE collects water tariff fees from each end user for treating and distributing tap water. **CONFIDENTIAL INFORMATION DELETED**. Water tariffs are regulated and approved by the PPC. The provincial Department of Finance appraises tariff proposals submitted by BIWASE in consultation with the Department of Construction and Department of Labor, Invalids and Social Affairs, and then submits these to the PPC for approval. The regulation (Decree 117 and 124) stipulates that if the approved tariff is lower than the actual water treatment cost, the PPC must cover the shortfall.

6. **Cost structure.** Operation and maintenance costs include raw water, electricity, chemicals, repair and maintenance, labor, administration, and other miscellaneous costs. The largest part of the operation and maintenance cost is raw water intake, which BIWASE draws from various sources for its existing water treatment plants as well as the additional 100,000 m<sup>3</sup>/day for this project. In Viet Nam, a water utility needs to obtain permission for raw water withdrawal for each water treatment plant. **CONFIDENTIAL INFORMATION DELETED**.

7. **Non-revenue water.** A useful performance indicator for the efficiency of operation is non-revenue water (NRW). BIWASE has a policy to manage NRW issues, including active leakage control, pressure management, speed, and quality of repairs. **CONFIDENTIAL INFORMATION DELETED**.

### **2. Waste Management Business**

8. **Revenue structure.** BIWASE also operates in the waste management sector (it has a treatment complex area of about 100 hectares in Chanh Phu Hoa ward of Ben Cat town in Binh Duong province), acting as a sole provider of municipal solid-waste treatment for the PPC and industrial hazardous and non-hazardous waste treatment services. BIWASE holds all necessary licenses and permits issued by MONRE for treating these wastes.

9. BIWASE is the sole provider of municipal solid-waste treatment services in Binh Duong. **CONFIDENTIAL INFORMATION DELETED**. It operates two composting plants with a total capacity of 840 tons per day, producing composted products with microorganisms and minerals for soil improvements. BIWASE enters into supply contracts with eight district people's committees covering the whole of Binh Duong province. The contracts are renewed annually. Tariffs for municipal solid-waste treatment are regulated by the PPC for the whole province. Tariff adjustments are usually initiated by BIWASE by submitting a proposal to the Department of Finance for appraisal and approved by the PPC. **CONFIDENTIAL INFORMATION DELETED**.

10. BIWASE is also one of the largest providers of industrial waste treatment for both hazardous and non-hazardous waste in Binh Duong and surrounding provinces **CONFIDENTIAL INFORMATION DELETED**. Treatment of industrial waste includes incineration, recycling, industrial wastewater treatment and sludge disposal, and sanitary landfilling. BIWASE has entered into supply contracts with over 2,000 industrial, commercial, and medical customers for waste treatment service. The tariff for industrial waste is not strictly regulated by the state and is subject to market and competitive forces. **CONFIDENTIAL INFORMATION DELETED**.

### **3. Wastewater and Sanitation Facilities Operation**

11. **Revenue structure.** BIWASE is the sole operator of municipal wastewater treatment and sanitation services in Binh Duong. It operates and maintains wastewater facilities owned by the PPC, which pays treatment and maintenance fees to BIWASE based on the treated wastewater volume. **CONFIDENTIAL INFORMATION DELETED**.

#### **D. Project Performance Monitoring, Reporting, and Evaluation**

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