

# Inclusive Business Case Study: AEGEA Saneamento e Participações S.A. (AEGEA)

Location: Brazil Sector: Utilities – water and sanitation IFC Investment: BRL 100 million loan and BRL 25 million detachable warrant

## COMPANY BACKGROUND

AEGEA Saneamento e Participações S.A. (AEGEA) is the third largest private sector provider of water and sanitation services in Brazil. The company is majority-owned by the Equipav Group, a family-owned corporation founded in the 1960s with operations spanning water and sanitation, transportation, engineering, construction materials, and agribusiness. The IFC, the Government Investment Corporation of Singapore (GIC) and IFC's Asset Management Company are minority shareholders.



## AEGEA'S INCLUSIVE BUSINESS MODEL:

In 2010, the Equipav Group established AEGEA as a holding company<sup>1</sup> to consolidate its water and sanitation concessions. AEGEA specializes in long-term brownfield concessions—those with water and sanitation infrastructure—but in need of rehabilitation or expansion to reach new customers. AEGEA also sub-contracts to municipally-owned utilities or acquires poorly-performing concessions. Each concession is operated by a project company (the concessionaire) that AEGEA establishes, acquires, or has a partial stake in.

AEGEA's strategy is to increase service coverage, improve service quality, and achieve operational efficiency in a short time. The company has concessionaires in six states<sup>2</sup>, including two in frontier regions—where some municipalities have populations as low as 3,000—and plans to expand in the north and northeast.<sup>3</sup>

Some concessions serve large numbers of low-income households as they are in frontier regions or poorer states; others reach such households concentrated in small pockets of the region being served. Service coverage targets, connection fees, and tariffs are formalized in concession agreements. Among various factors, AEGEA takes into account households' ability to pay when setting connection fees and tariffs. In Campo Grande, for example, Águas Guaribroa (AG) offers water and sewage connections for houses on non-paved streets for BRL 174 (USD 77) and BRL 184 (USD 81) respectively. This is around 25% or less of Brazil's minimum salary of BRL 724 (USD 321) per month as of 2013. Connection fees are higher for houses on paved streets.

AEGEA offers competitive tariffs to customers at all income levels—often lower than rates customers previously paid. Its social tariff program grants a 50% discount on regular rates to qualified customers. Social tariffs are not mandatory, but some municipalities incorporate this requirement in the concession bidding process. AEGEA can negotiate limits on the number of social tariff connections with municipalities and the regulatory agency to ensure financial sustainability.

Requirements for households to qualify for social tariffs vary and are determined by municipality. In the city of Campo Grande, for example, these requirements are household income less than the minimum salary as well as electricity and water consumption not exceeding 100 Kwh/month and 20m<sup>3</sup>/month respectively. If water consumption exceeds 20m<sup>3</sup> in a certain month, the household is charged the regular tariff for the amount exceeding this limit. If the limit is exceeded thrice, the household is no longer eligible for the social tariff. The social tariff rates are BRL 1.36/m<sup>3</sup> (USD 0.60) for water and BRL 0.95/m<sup>3</sup> (USD 0.42) for sewage. Further increasing affordability, low-income customers can spread payments for connection fees over

several bills. Customers can also monitor water consumption by reading hydrometers in homes.

AEGEA believes that strong relationships with local communities are critical for successful operations and the maintenance of its license to operate. Its project companies utilize various means to achieve these goals. Outreach activities increase uptake of legal connections since tampering and fraud are common problems. Education campaigns and hands-on learning through volunteer activities—often in collaboration with city councils, education departments, and other key stakeholders—spread messages about the benefits of water and sanitation for personal health and the environment. Feedback channels allow residents to advise AEGEA about network problems such as pipe leaks, enabling prompt repair and avoiding unnecessary losses.

In-person outreach is not only effective in integrating low-income customers into the network, but also in reengaging past customers. In 2011, AG created the *Água Solidária* program to assist people living in slums or shanty towns. Company staff identify and engage households, assisting them with paperwork for social tariff connections. Residents whose connections were cut are offered flexible conditions to amortize outstanding debts through discounts and installment payments. If connections exist, staff look for pipe leaks and assess the potential for repair, thus creating additional savings for customers. As of 2013, 1,700 families have benefited from *Água Solidária*.

Customer service benefits both AEGEA and the communities in which it operates. AEGEA's 24-hr call center dispatches mobile service units. AG has a 200-strong mobile task force that serves neighborhoods farther from the city, saving people time and money they would otherwise spend traveling to a main office. Its services are varied: new connections and re-connections, meter reading, billing and payment, and fraud detection. Since 2013, this task force has been using electronic tablets to maximize efficiency and revenue collection.

Finally, AEGEA keeps costs down through high levels of operational efficiency - it has reduced water losses, power consumption, and staffing costs among other areas. It optimizes energy use at production facilities, pumping stations, and in distribution networks. Its Operations Control Centers centrally monitor and manage operations. Automatic meter reading helps identify fraud (e.g. higher than average water consumption) and thus reduce non-revenue water levels.

<sup>1</sup> In this case, AEGEA's project companies are referred to as AEGEA unless otherwise specified

<sup>2</sup> Mato Grosso do Sul, Rio de Janeiro, São Paulo, frontier states - Mato Grosso and Pará; and Santa Catarina (50% ownership of sanitation service provider for Penha municipality)

<sup>3</sup> This case focuses on Águas Guaribroa in Campo Grande (population of ~800,000) and Prologos in Rio de Janeiro (5 municipalities with population of ~370,000 and potential reach up to two million during summer)

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## DRIVERS FOR AEGEA'S INCLUSIVE BUSINESS MODEL

- Market opportunity to bridge gap in sanitation services and increase efficiency of water services
- Enabling environment for private sector participation in water and sanitation
- Tariff levels enable cost recovery and reasonable returns for efficient operators

Significant gaps in sanitation services present a strong market opportunity for AEGEA. In 2011, around 48% of Brazil's population had access to sanitation and 38% of sewage was treated. Also, while 82.4% of the population had access to water, the average leakage rate was noticeably high at 38.8%.<sup>4</sup> At the same time, people's ability to pay for utilities has increased. Poverty (people living on \$2/day) fell from 21% to 11% of the population between 2003 and 2009<sup>5</sup>.

The environment for private sector participation in the sector is improving. In Brazil, municipalities deliver water and sanitation through concessions with State Water Companies (state-owned water utilities). Smaller concessions are managed by municipal companies or private operators. The Brazilian National Plan for Basic Sanitation outlines an estimated investment of BRL 508 billion (USD 225 billion) by 2033 to expand coverage in order to reach targets such as 99% water coverage, 93%

treated sewage, and a 31% leakage rate. Despite federal funding, there are investment gaps, making private sector participation necessary.

In 2013, the market share for private companies, based on number of households reached, was 10.7% and is expected to grow to 30% by 2030<sup>6</sup>; regulatory changes since 2000 have helped. The 2007 Basic Sanitation Law requires municipalities to prepare water and sanitation plans, develop formal contracts, and increase transparency and accountability. Based on the private sector's success, municipalities are growing more open to private sector concessions. Tariff levels in some regions also enable cost recovery and reasonable returns; in areas where tariffs are below cost recovery, private companies can achieve reasonable financial returns by maximizing operational efficiency.

## RESULTS OF AEGEA'S INCLUSIVE BUSINESS MODEL

- Serving 2.2 million customers, of which 285,000 earn up to the minimum wage per month
- Net revenues of BRL 492 million (USD 220.9 million) and EBITDA of BRL 224 million (USD 100.5 million) as of December 2013
- Expanded sanitation coverage from 34% to 66% in the Águas Guariroba concession between 2006 and 2013

AEGEA operates in 32 municipalities in six states in Brazil including two frontier region states, providing water and sanitation services to 2.2 million people. Approximately 12.8% of the households (285,000 people) in the municipalities served by AEGEA's concessionaires earn up to the minimum wage per month. The company's net revenues increased from BRL 233 million (USD 104.6 million) to BRL 492 million (USD 220.9) between 2009 and 2013. Its EBITDA was BRL 224 million (USD 100.5 million) and EBITDA margin was 45.6% as of December 2013.

The company has demonstrated strong results in turning around utilities. In the city of Campo Grande, Águas Guariroba increased sewage coverage levels from 34% to 66% between 2006 and 2013. It more than doubled sewer collection network piping from 745 to 1,675 kilometers. The leakage rate reduced from 56% to 20% during the same time period—below the average of 39% in Brazil. Delinquency rates were cut from

8.7% to 2.5% between 2007 and 2013. Similar success has been achieved by Prolagos which reduced physical water losses from 50% to 30% and increased sanitation coverage from 44% to 76% between 2006 and 2013. In the social tariff category, Águas Guariroba has registered 5,500 customers out of the maximum of 8,500.

Access to water and sanitation services has improved the health of people and that of the environment in Campo Grande. According to the Campo Grande Municipal Health Department, there has been a 34% reduction in water borne diseases in the city between 2005 and 2009. Also, Prolagos has captured and treated wastewater flows to the Araruama Lagoon, a major lake and source of economic activity. It had been shut down due to pollution, but improvements in water quality have enabled fishing and recreation in the lagoon to resume.

## IFC'S ROLE AND VALUE-ADD

- Provide long-term, local currency financing to help AEGEA fund initial capital investments in new concessions as well as acquire small and medium-size concessions
- Facilitate mobilization of additional capital—equity investment by the Government Investment Corporation of Singapore
- Strengthen AEGEA's credibility in the investment community, enabling the company to pursue new growth opportunities by leveraging debt at the project level from local development finance institutions.



### IFC's Investment:

BRL 100 million (~US\$50 million) in long-term financing with a detachable warrant of up to BRL 25 million (~US\$12.4 million)

### Investment Year:

2012

4 National Information System on Sanitation (SNIS) survey in 2011

5 World Bank. Online at <http://www.worldbank.org/en/country/brazil/overview> (accessed February 19, 2014)

6 Source: AEGEA