

# Water & Sanitation PPPs

## Full Description

Almost fifty percent of the developing world's population - [2.5 billion people – lack improved sanitation facilities, and almost 1 billion people](#) still use unsafe drinking water sources, and even those with access often receive unsafe and inadequate service. Sustainable Development Goal 6 on Clean Water and Sanitation, by 2030, sets tough targets:

- 6.1 achieve universal and equitable access to safe and affordable drinking water for all
- 6.2 achieve access to adequate and equitable sanitation and hygiene for all
- 6.4 substantially increase water-use efficiency across all sectors.

Water is also crucial to food security and irrigation, and is affected by climate change. In an infrastructure-intensive sector, improving access and service quality to meet the SDGs cannot be done without massive investment. Around the developing world, the water sector is chronically under-funded and inefficient. In this context, Public-private partnerships (PPPs) can be a mechanism (among others) to help governments fund much needed investment and bring technology and efficiency that can improve the performance and financial sustainability of the water sector.

Governments are using in the water and sanitation sector increasingly to finance and operate bulks water supply and wastewater treatment. Governments turn to PPPs to introduce new technology and innovation where traditional sources are being scarce, such as in desalination and water reuse. Utilities are drawing on specific expertise, such as non revenue water reduction and pressure management, to bring efficiencies and service improvements. Private investors and providers are increasingly local and regional, increasing competition and bringing down prices.

A key challenge in sustainability of the sector is customer tariffs. Water utilities have difficulty investing in infrastructure and maintaining it when they cannot rely on revenue streams that cover the costs of operation and investment. Whilst subsidies and grants from government continue to play an important role in financing water and wastewater infrastructure, a stable revenue stream is more dependable and allows utilities to carry out business and asset planning.

Navigate the following subsections for more information and sample laws, regulations and agreements.

- [Water Sector Regulation](#)
- [Water and Sanitation Utility Reform](#)
  - [Empresas Mixtas / Joint Ventures](#)
- [Urban Water and Sewerage/ Sanitation Agreements](#)
  - [Management, Operation, Maintenance Contracts](#)

- [Concessions, Design Build and Operate \(DBO\) and Build-Operate-Transfer \(BOT\) Agreements for water and wastewater](#)
- [Lease and Affermage Contracts](#)
- [Raw and Treated Water Bulk Supply Agreements](#)
- [Small scale Water Projects: Rural and Peri-Urban](#)
- [PPPs in Irrigation](#)
- [Theft / Non-Technical Losses](#)
- [Toolkits - Water and Sanitation](#)
- [Further Reading - case studies and lessons learnt](#)
- [Mainstreaming Gender in Water and Sanitation Projects](#)

## Further Reading

### Case Studies

- [Hargeisa Water Agency Commercial Finance Pre-feasibility Report](#). The document provides the pre-feasibility report for the investment opportunities proposed by the Hargeisa Water Agency.
- [Sustainable Development of Inland Waterways Transport in Vietnam](#), prepared by a World Bank team, provides a comprehensive review and assessment of the challenges that the sector faces, along with a reform program recommended to the Government of Vietnam that could help improve the enabling environment for the inland waterways transport industry and further its growth and technical sophistication.
- [Water Insecurity and Sanitation in Asia](#). This volume brings together 17 studies that examine various innovations in the water and sanitation sector in Asia and, most importantly, identify their spillover effects.
- [Vietnam Initial Assessment: Energy Efficiency and Nonrevenue Water](#). This report is a key analytical study of the project and is centered on addressing the knowledge gaps and providing technological recommendations on EE improvement and NRW reduction to generate positive impacts in the water sector in Vietnam.
- [Ensuring Water Supply in Kuala Lumpur](#) - In 1998, Kuala Lumpur, the capital of Malaysia and home to 1.5 million people, was running out of water. Water was rationed for five months. To end this crisis, the State Waterworks Department hired a contractor under a performance-based contract (PBC) to reduce non-revenue water (NRW). This case showcases the project.
- [Support to Armenia's Second Generation Water PPPs](#) by Philippe Marin (Senior Water and Sanitation Specialist) and Dambudzo Muzenda (Water and Sanitation Specialist) - both of the World Bank's Water Global Practice - with Andranik Andreasyan, the former Chairman of the State Committee for

Water Economy (SCWE) for most of the water PPP reform, June 13, 2017.

- Panama - [Estudio de Caso - Contrato de mejoras integrales de los servicios de agua potable en el Distrito de Colón, Panamá](#), Public-Private Infrastructure Advisory Facility (PPIAF), October 2014 (Spanish).
- China - [Wastewater Treatment: Case Study of Public-Private Partnerships \(PPPs\) in Shanghai](#), Asian Development Bank (ADB) November 2010
- Jordan - [Water Governance in Jordan – Overcoming the Challenges to Private Sector Participation](#), Studies on Water, Organization for Economic Co-Operation and Development (OECD), June 2014.
- Tunisia - [La gouvernance des services de l'eau en Tunisie – Surmonter les défis de la participation du secteur privé](#), Studies on Water, OECD, June 2014 (French).
- [Public-Private Partnerships for Urban Water Utilities: A Review of Experiences in Developing Countries \(2010\)](#) This report analyzes the market growth of PPPs in the developing world since 1990, and the performance of more than 65 large water PPP projects?representing more than 100 million people?for access, service quality, operational efficiency, and tariff levels.
- [Water PPPs in Africa](#), World Bank Group, WSP, July 2014.
- [Mixed Private-Public Ownership Companies “Empresa Mixta” \(2011\)](#) This review of the *empresa mixta* model in Latin America was undertaken to better understand its structure, applicability and strength in mitigating risks in the water and sanitation sector.
- [Ways To Improve Water Services by Making Utilities Accountable \(2008\)](#) This review aims to help those who work in and with water utilities, as well as organized users, regulators, and policymakers to improve the quality of water services by making service providers more accountable to the people they serve.
- [Characteristics of Well Performing Public Water Utilities - Water Supply & Sanitation Working Notes \(2006\)](#) This report presents findings on attributes of well-run public utilities and attempts to identify important factors that influence their performance. The scope is also largely oriented to utilities that serve urban communities, but with varying characteristics and service objectives.
- [Key Topics in Public Water Utility Reform \(2008\)](#) This report presents a framework of attributes of well-functioning utilities and how they have introduced key institutional changes. It aims to help water and sanitation sector practitioners choose and apply public utility reform approaches. The report concludes that structural trends are altering the landscape in which water utilities operate and that these alterations offer opportunities for change.
- [The Limits and Possibilities of Prepaid Water in Urban Africa](#) : Lessons from the Field (2014) by Chris Heymans, Kathy Eales and Richard Franceys, World Bank Group, Water and Sanitation Program (WSP), August 2014.
- [Water for Life: The Impact of the Privatization of Water Services on Child Mortality](#) This study finds that child mortality fell 8 percent in the areas that privatized their water services.
- [Investing in Water Infrastructure: Capital, Operations and Maintenance \(2012\)](#) This paper outlines the major challenges when financing global water infrastructure. World Bank Group
- [A Framework to Approach Shared Use of Mining-Related Infrastructure](#) (2014) by Perrine Toledano, Sophie Thomashausen, Nicolas Maennling, and Alpa Shah, Vale Columbia Center on Sustainable International Investment, Columbia University, 2014. The publication presents an economically, legally and operationally rational framework to enable shared use of mining-related infrastructure, including rail, ports, power, water, and internet and telecommunications (ICT).

## See also:

- [Climate-Smart PPPs](#)

Related Content

[Water & Sanitation PPPs](#)

[Water Sector Regulation](#)

[Utility Restructuring Corporatization Decentralization Performance Contracts](#)

[Joint Ventures / Government Shareholding in Project Company](#)

[Water and Sanitation Agreements](#)

[Water Management/Operation and Maintenance Contracts](#)

[Water and Sanitation Concession / BOT / DBFO](#)

[Water and Sanitation Lease and Affermage Contracts](#)

[Raw and Treated Bulk Water Supply Agreements](#)

[Small Scale Water Projects - Rural and Peri-Urban](#)

[PPPs in Irrigation](#)

[Theft / Non-Technical Losses \(Water and Electricity\)](#)

[Water & Sanitation PPP Toolkits](#)

[Case Studies and Lessons Learned - Water](#)

[Gender & Water and Sanitation Projects](#)

[Additional Resources](#)

[Sub-national and Municipal PPPs](#)