



PERÚ

Ministerio  
de Vivienda, Construcción  
y Saneamiento

# Public Private Partnerships (PPP)

**Julio Kosaka**  
Viceminister of Construction  
and Sanitation



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# Diagnosis of Sanitation Services in Peru



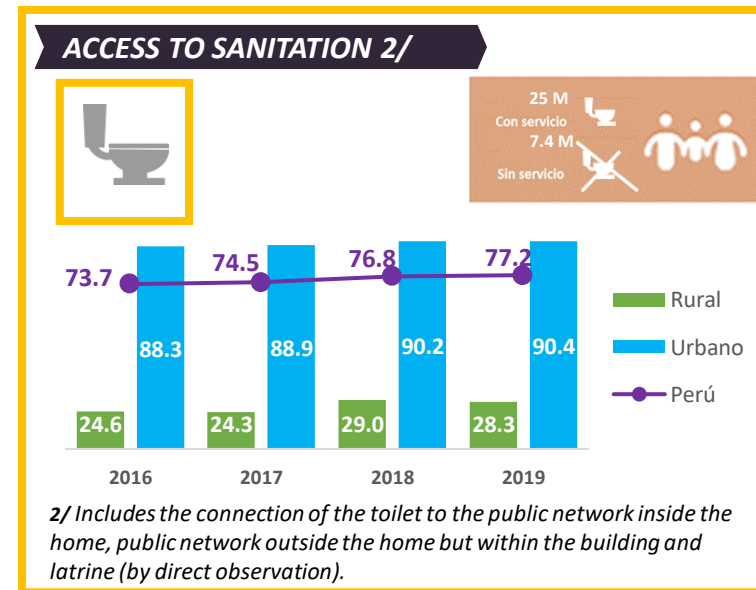
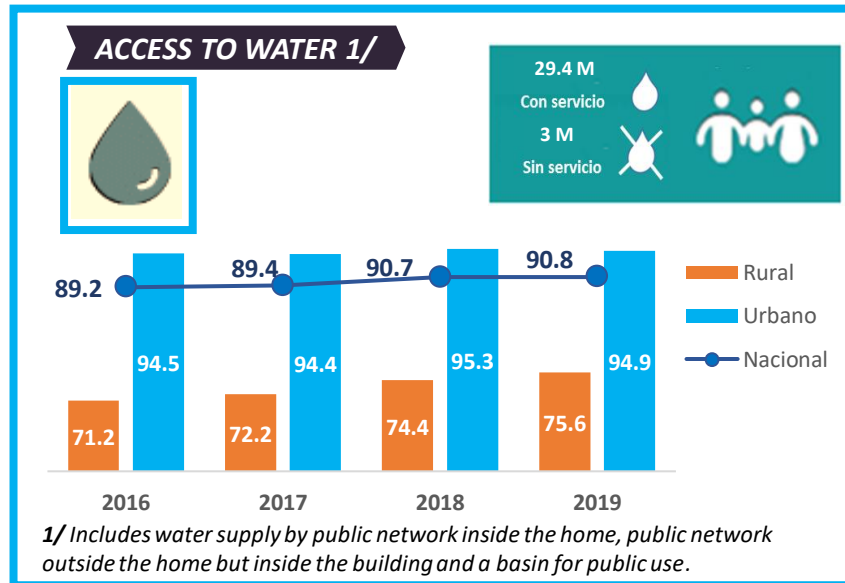
With a population of more than 31 million inhabitants, Peru is the 4th most populous country in South America.



77% of the population live in urban areas, while 23% live in rural areas.



- ✓ 3 Million (9%) of Peruvians without access to water through the public network.
- ✓ 7.4 Million (23%) of people do not have access to sewers or sanitary disposal of excreta.
- ✓ Only 44 % of the wastewater captured by the Sanitation Service Providers (EPS) enters the WWTP and has adequate treatment (\*).

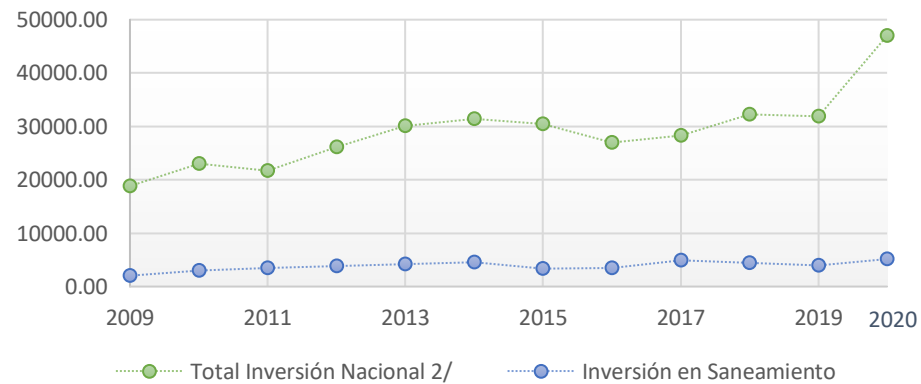


✓ The services **are not** sustainable.



# Sanitation Investment Gap

## Sanitation Investment per Government level (Million of Soles)



YEAR	TOTAL DOMESTIC INVESTMENT 2/	INVESTMENT IN SANITATION	NATIONAL GOVERNMENT	REGIONAL GOVERNMENT 1/	LOCAL GOVERNMENT 1/
2009	18,908	2,099	121	420	1,559
2010	22,991	3,046	139	653	1,767
2011	21,743	3,490	160	891	1,906
2012	26,162	3,832	94	759	2,485
2013	30,126	4,244	181	638	2,599
2014	31,490	4,656	151	411	3,037
2015	30,482	3,369	165	286	2,300
2016	26,955	3,506	160	347	2,556
2017	28,311	4,965	577	249	3,469
2018	32,285	4,459	775	296	2,752
2019	31,945	4,006	834	232	2,696
<b>2020</b>	<b>46,947</b>	<b>5,179</b>	<b>1,258</b>	<b>337</b>	<b>3,583</b>
<b>TOTAL</b>	<b>348,345</b>	<b>46,850</b>	<b>4,616</b>	<b>5,520</b>	<b>30,708</b>

Source: OGEI-OGPP -MVCS

## Sanitation Service Providers (EPS)

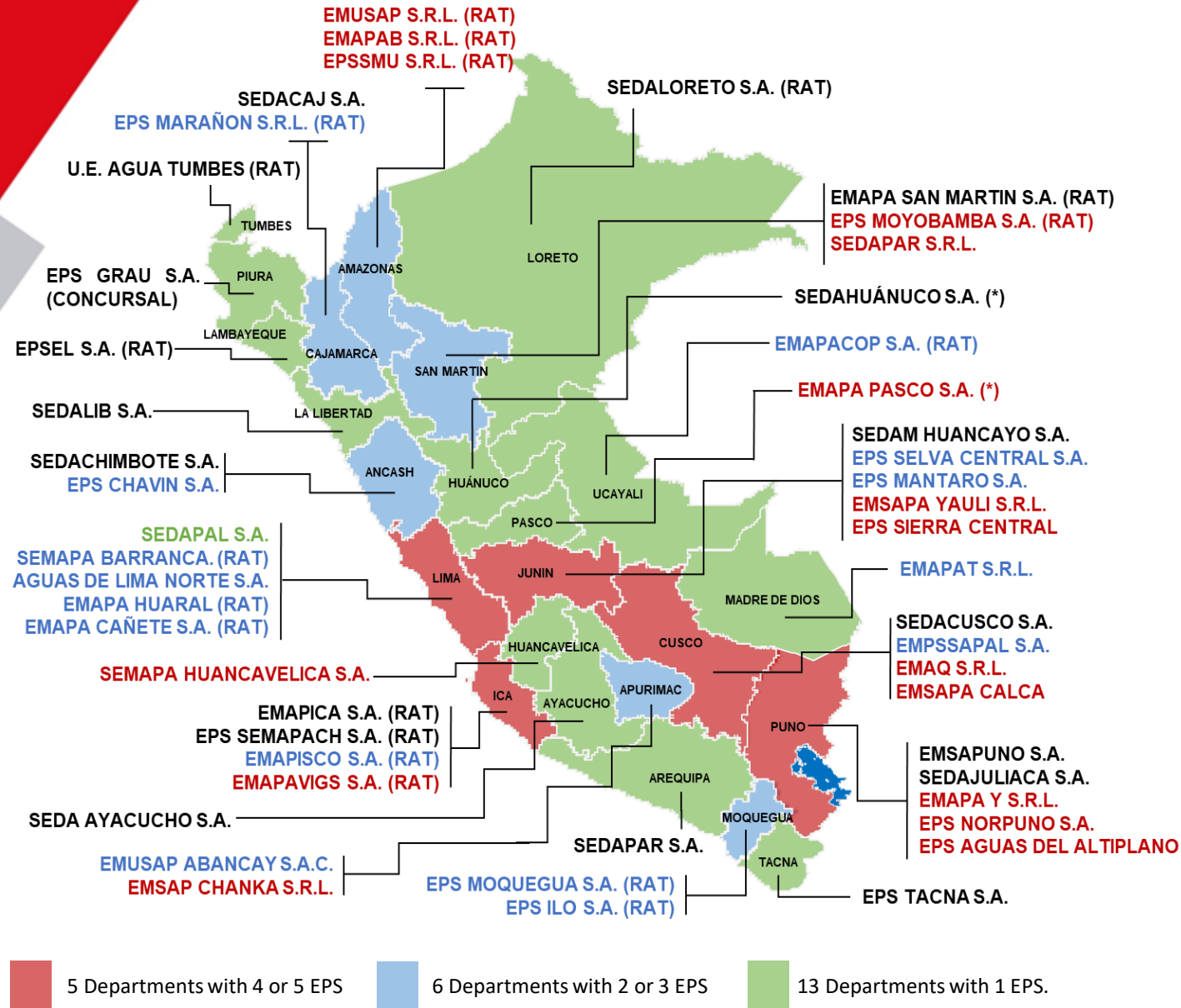
INVESTMENT AREA	TOTAL S/.	%	
		PARCIAL	TOTAL
<b>Extension of coverages</b>	<b>39,717,172,819</b>		<b>80.1%</b>
Potable water	5,815,631,950	14.6%	
Sewarage	26,145,111,816	65.8%	
TAR	7,756,429,053	19.5%	
<b>Rehabilitation and Improvement</b>	<b>8,004,673,970</b>		<b>16.2%</b>
Potable water	4,176,609,563	52.2%	
Sewarage	3,828,064,407	47.8%	
<b>Business Strengthening</b>	<b>1,431,655,404</b>		<b>2.9%</b>
<b>Micro measurement</b>	<b>390,326,139</b>		<b>0.8%</b>
<b>TOTAL</b>	<b>49,543,828,332</b>		<b>100%</b>

**S/49.5 Billion**

**There is a significant infrastructure gap. To achieve universal water and sanitation coverage, a total investment of S/ 49.5 billion is required.**

Source: The National Sanitation Plan 2017-2021 (MVCS)

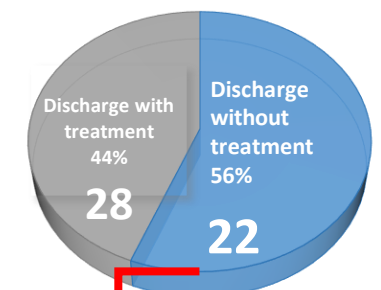
# Diagnosis of Wastewater Treatment in Peru



## Sanitation Service Providers (EPS)

EPS Management	Total
Municipalities (No RAT)	26
OTASS (RAT)	19
* In the process of entering the RAT	3
FONAFE (Sedapal)	1
Creditor committee – Bankruptcy Regime (Grau)	1
<b>Total</b>	<b>50</b>

## Wastewater discharges



**22 EPS without wastewater treatment.**  
 -19 EPS do not have a Wastewater Treatment Plant.  
 -03 EPS do not treat wastewater

# Strategies for Closing Sanitation Gaps

The MVCS implements a series of financing and execution strategies to close gaps in sanitation services.

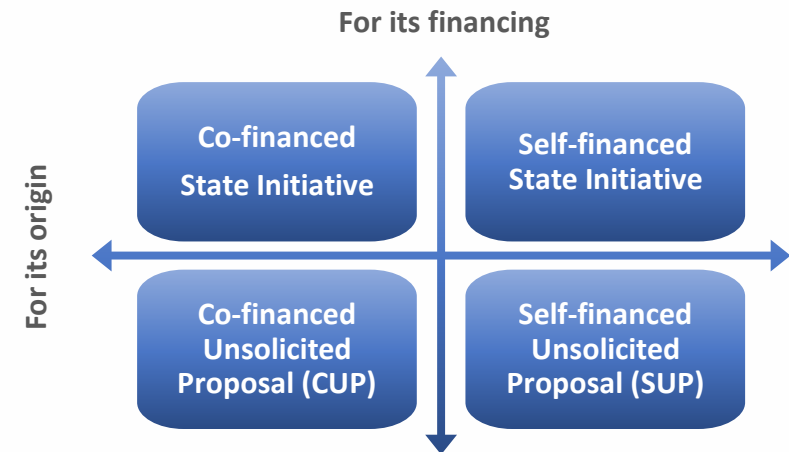
**1** **Public Investment** (Refundable and non-refundable transfers and international cooperation, executing units)

**3** **Private Investment**

➤ Works for Taxes

➤ **Public Private Partnerships (PPP)**

**2** **Special Regime**  
Water Supply Contract (Emergency Decree N° 011-2020)



# PPP in Execution



1

## TABOADA WWTP

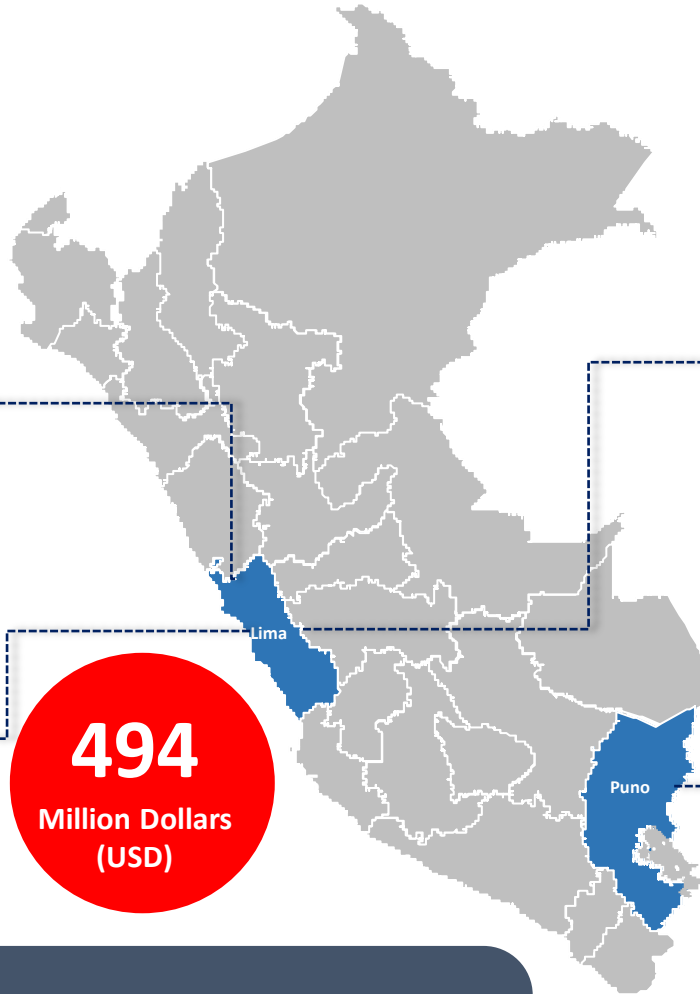
- **Term:** 25 years
- **Investment:** USD148 million (without VAT)
- **Average flow:** 14 m<sup>3</sup>/s
- **Beneficiaries:** 4.3 million inhabitants
- **Status:** In operation since December 2013



2

## LA CHIRA WWTP

- **Term:** 25 years
- **Investment:** USD 79,0 million (without VAT)
- **Average flow :** 6.3 m<sup>3</sup>/s
- **Beneficiaries:** 2.6 million inhabitants
- **Type of treatment:** advanced preliminary
- **Status:** In operation since June 2016
- **Addendum to the contract to extend the WWTP**
- **Average flow:** 3.41 m<sup>3</sup>/s
- **Investment:** USD 38 million approx.



**494**  
Million Dollars  
(USD)

## PPP CONTRIBUTION

Wastewater treatment: 21.96  
m<sup>3</sup>/s.  
(does not include the expansion of the La Chira WWTP).



3

## PROVISUR (Provision of sanitation services in the southern districts of Lima)

- **Term:** 25 years
- **Flow:** 0.18 m<sup>3</sup>/s wastewater
- **Flow:** 0.25 m<sup>3</sup>/s – 0.40m<sup>3</sup>/s wastewater.
- **Investment:** USD 87 million (without VAT)
- **Beneficiaries:** 100 thousand inhabitants
- **Status:** In execution

4

## TITICACA WWTP

- **Term:** 30 years
- **Total average flow:** 1.47 m<sup>3</sup>/s
- **Investment:** USD 180.0 million (without VAT)
- **Beneficiaries:** 1.2 million inhabitants
- **Status:** In execution (Preparation of Technical File).



The continuity of the investment is ensured within the framework of the Budget Law 2021 with PEN 1,061,430 from the Titicaca WWTP.

**CONCESSION CONTRACTS SIGNED**



TABOADA WWTP - NORTHERN LIMA



LA CHIRA WWTP - SOUTHERN LIMA



PROVISUR - SOUTHERN LIMA



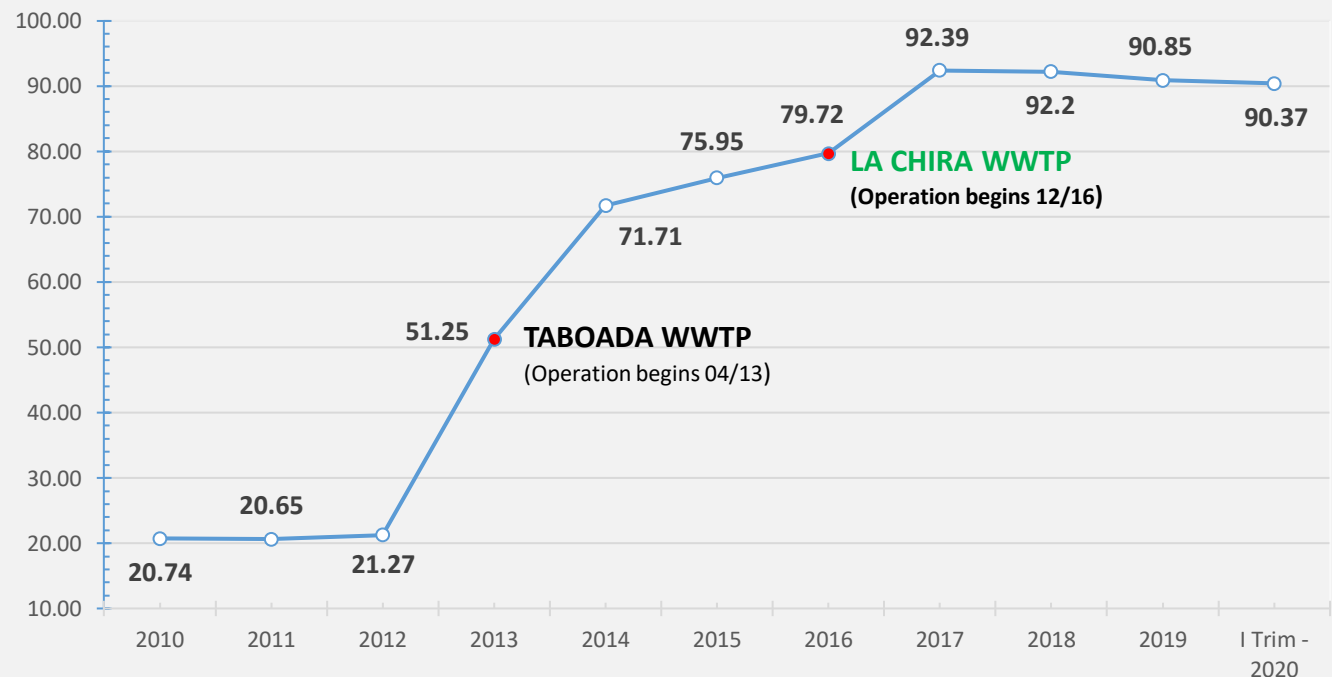
TITICACA – PUNO WWTP



CHILLÓN WWTP – NORTHERN LIMA

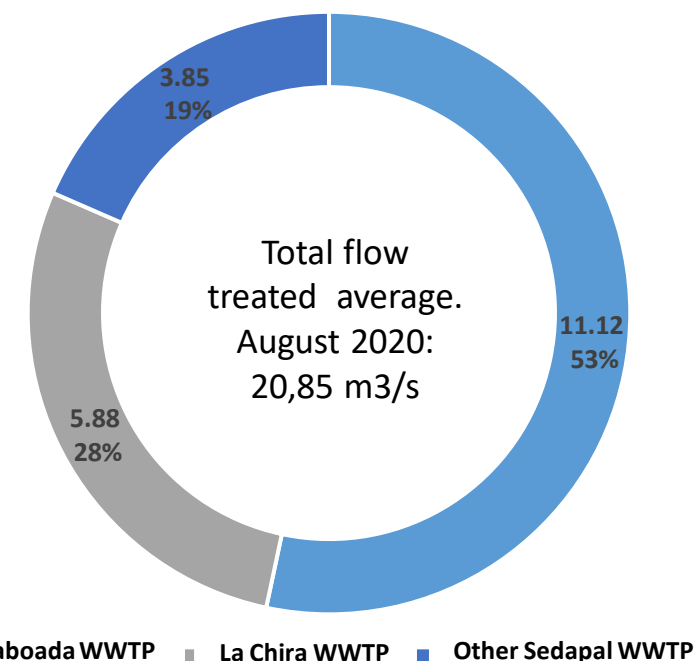
# PPP contribution to closing gaps in sanitation services Lima- Callao

### Wastewater Treatment (%) Sedapal S.A.



Source:  
Benchmarking SUNASS (2010-2018)  
<http://www.sedapal.com.pe/indicadores-de-calidad-del-servicio>, March 2020.

### PPP contribution in wastewater treatment



Source:  
<http://www.sedapal.com.pe/tratamiento-de-aguas-residuales>,  
August 2020

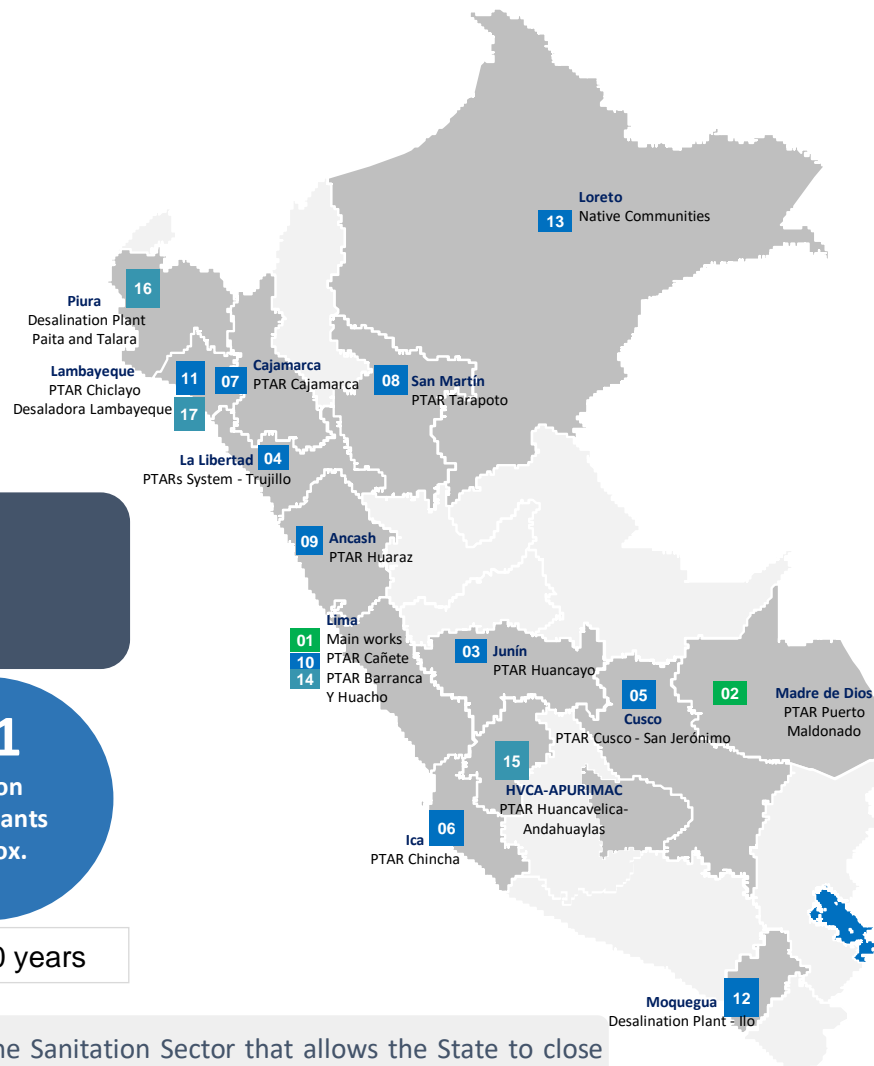
# PPP Project Portfolio



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17 Projects



INVESTMENT: **PEN 6,500 Million**

Beneficiaries:



7.1 Million inhabitants approx.

Concession term: from 20 to 30 years

✓ PPPs are a financing modality in the Sanitation Sector that allows the State to close the gaps and have sustainable projects.

✓ The PPP project portfolio for the design, financing, construction, operation and maintenance of drinking water, sewerage and wastewater treatment will benefit more than 20% of the Peruvian population.



The continuity of the investment is ensured within the framework of the 2021 Budget Law of Puerto Maldonado WWTP

N°	Project	Region	Amount Million (PEN with VAT)	Phase	Type of PPP
1	Main works	Lima	2,720.0	Structuring	IEA
2	Puerto Maldonado WWTP	Madre de Dios	212.55	Structuring	IEC
3	Huancayo WWTP	Junín	**	Formulation	CO-FINANCED UNSOLICITED PROPOSAL
4	Trujillo WWTP	La Libertad	589.6	Formulation	
5	Cusco- San Jerónimo WWTP	Cusco	192.3	Formulation	
6	Chincha WWTP	Ica	156.6	Formulation	
7	Cajamarca WWTP	Cajamarca	294.4	Formulation	
8	Tarapoto WWTP	San Martín	123.1	Formulation	
9	Huaraz WWTP	Ancash	120.4	Formulation	
10	Cañete WWTP	Lima	157.3	Formulation	
11	Chiclayo WWTP	Lambayeque	489.6	Formulation	
12	Desalination Plant Ilo	Moquegua	120.0	Formulation	
13	Community Sanitation Services - Loreto	Loreto	150.0	Formulation	
14	Huacho and Barranca WWTP	Lima	195.0	Planning and programming	
15	Huancavelica- Andahuaylas WWTP	Huancavelica- Apurímac	115.0		
16	Desalination Plant Paita and Talara	Piura	576.0		
17	Desalination Plant Lambayeque	Lambayeque	230.0		

(\*) Investment amounts updated as a result of advances in formulation.

(\*\*) Confidential

# Conclusions

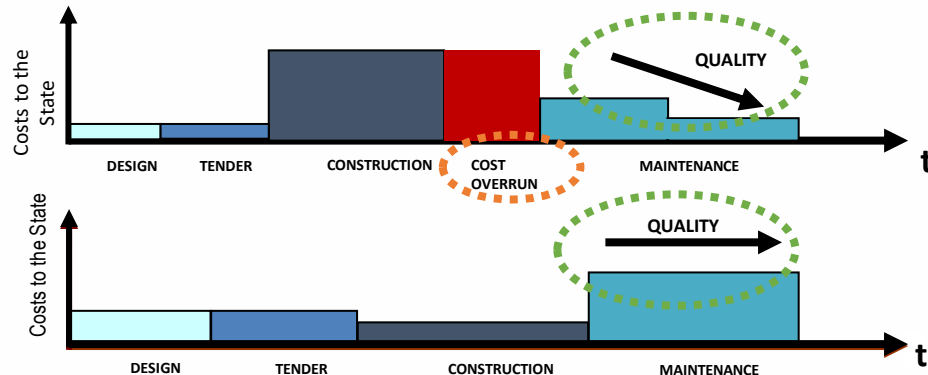
## PUBLIC PRIVATE PARTNERSHIPS

### > The provision of infrastructure is advanced

The project is fully or partially financed by the private sector instead of using public resources in year zero.

- The private sector recovers its investment through user fees or deferred payments by the public sector, based on the availability of infrastructure and services.
- The private sector has greater incentives to seek alternative sources of financing such as:
  - Supplementary income
  - Reduce collection losses

Traditional public work



PPP

### > Optimal project risk allocation.

### > Contribution to closing the public infrastructure gap is allowed.

### > Predictability: in future commitments and flows

Commitments generated by PPP

#### Strong commitments

- ✓ Obligations to pay specific or quantifiable amounts
- ✓ Generated as compensation for the provisions of the contract

#### Contingent commitments

- ✓ Potential payment obligations
- ✓ They are derived from one or more events corresponding to risks inherent to the PPP project.

### > They are given through long-term contracts

Average term of awarded projects:

**22 years**

- ✓ **Deadline** of the PPP contracts: 60 years
- ✓ **Minimum term for IPC**: 10 years

# Conclusions and Perspectives

## PUBLIC PRIVATE PARTNERSHIPS

➤ The Ministry of Housing, Construction and Sanitation is promoting a portfolio of sanitation service projects (drinking water, sewerage, and wastewater treatment) for more than S/ 6,000 million investment and benefiting more than 30% of the Peruvian population, through PPPs, for design, financing, construction, operation, and maintenance.

➤ In response to the water stress that Peru is facing, the MVCS is promoting the development of projects under the new potable water supply and wastewater treatment regime, through DU 011-2020, which fosters private investment, as the provider of these services to the EPS sanitation service companies.

➤ Wastewater reuse and commercialization, sludge reuse, and biogas generation are significant aspects that will be included in the design of wastewater treatment projects under PPPs.

➤ The private participation, through PPPs, is a complementary mechanism to Public Works and Works for Taxes, which will continue to be promoted by the MVCS to close gaps in sanitation services.