

**Monitoring and Reporting on
Access to Water Supply
and Sanitation Services in Egypt:**
*Drawing on the MDG+ Initiative Indicators and
Key Performance Indicators*

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**MDG+ Initiative High Level Meeting
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Contents:

1

Introduction

2

**Monitoring and Reporting on Access to
Water Supply and Sanitation Services in Egypt**

3

Egypt Performance Indicators



Holding Company for Water and Wastewater

Introduction

Official Population No. for year 2015=85.7 million capita



254 cities

4770 villages





Holding Company for Water and Wastewater

Most of the population is allocated in only 5% of the total area of Egypt in the Delta and Nile Valley.

Water Resources (57 BCM/yr)

- **River Nile (55.5 BCM/yr)**
- **Groundwater (0.5 BCM/yr)**
- **Rainfalls (1.0 BCM/yr)**



Stakeholders after Reform Of HCWW

HCWW

Own, manage
and operate
through existing
25 companies

NOPWASD

Executive Agency of Water
& Wastewater projects
in the Governorates

EWRA

Regulatory Agency

CAPWO

Executive Agency of Water
& Wastewater projects
in Cairo & Alexandria



General Information About HCWW

**Number of
Affiliated
Companies**

- 25 Company

Service Area

- 27 Governorates



General Information About Water Sector In Egypt

Water Production
(Millions m³/day)

24.9

Number of Water
Treatment Plants

2,705
222 Filtration + 814 Compact + 1,629
Well Plants + 40 Desalination

Water Distribution
Networks (km)

157,000

Number of
Subscribers
(Millions)

14.36

Coverage Percentage

96%



General Information About Wastewater Sector In Egypt

Waste Water
Production
(Millions m3/day)

10.5

Number of Waste
Water Treatment
Plants

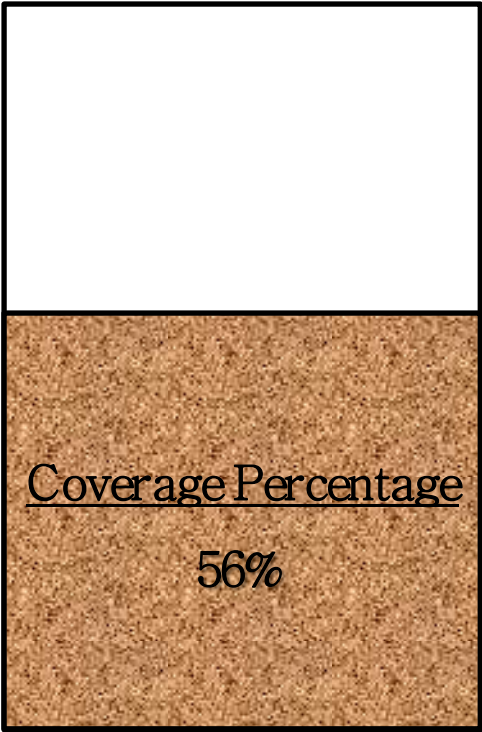
400

Waste Water
Networks (km)

44,000

Number of
Subscribers
(Millions)

7.4





Holding Company for Water and Wastewater

The Millennium Development Goals (MDGs)



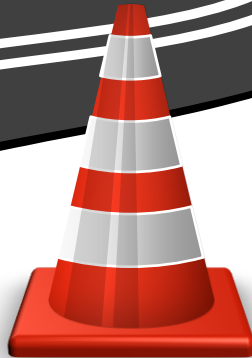
SDGs

- By 2030,
1. achieve universal and equitable access to safe and affordable drinking water for all.
 2. achieve access to adequate and equitable sanitation
 3. improve water quality



MDG+

1. Water Indicators
2. Waste Water Indicators



MDGs

Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation



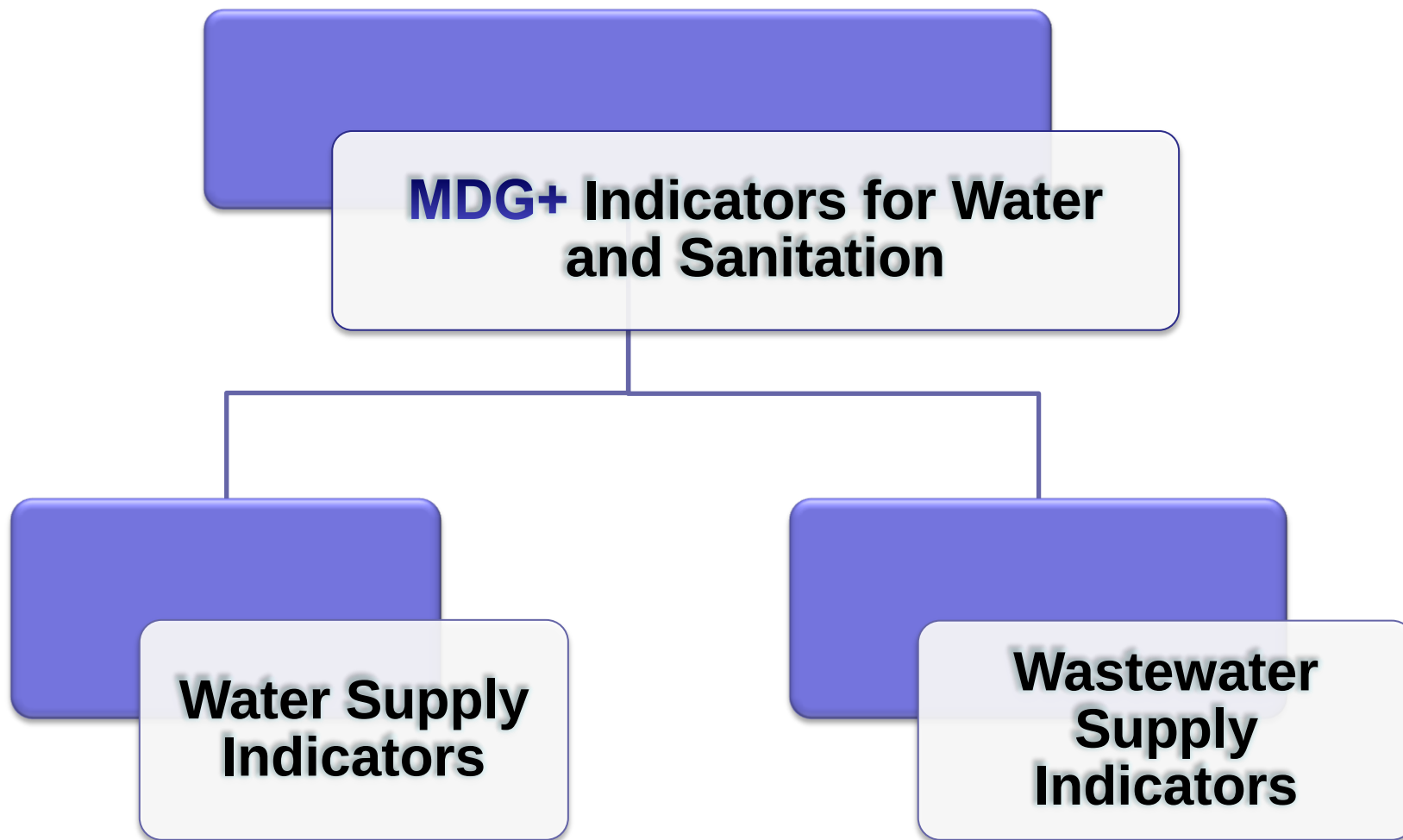
GOALS



Holding Company for Water and Wastewater

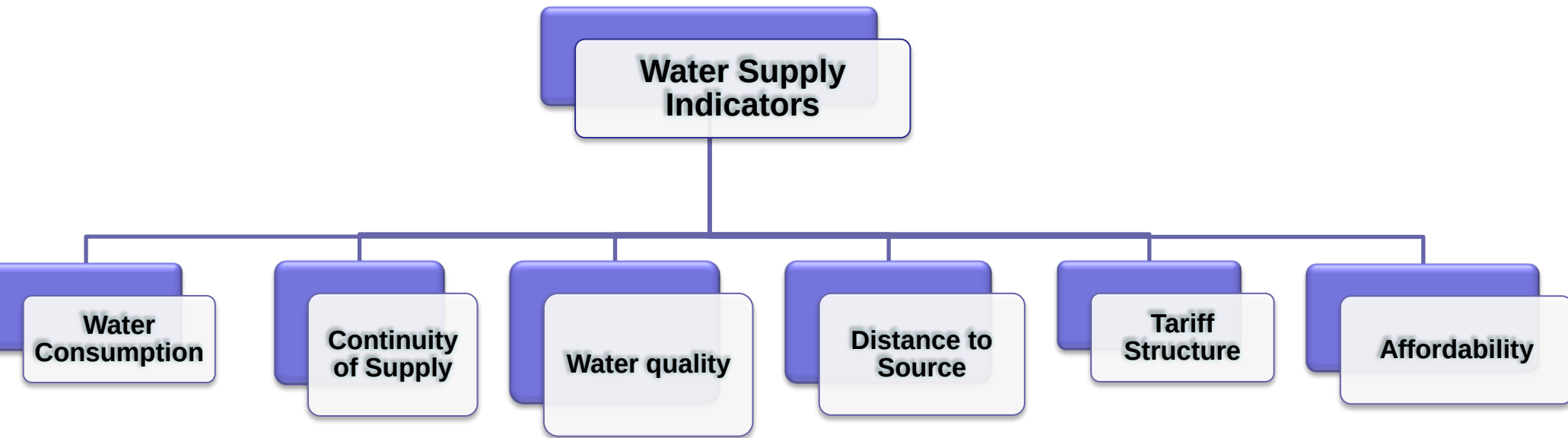
MDG+ Indicators

Holding Company for Water and Wastewater





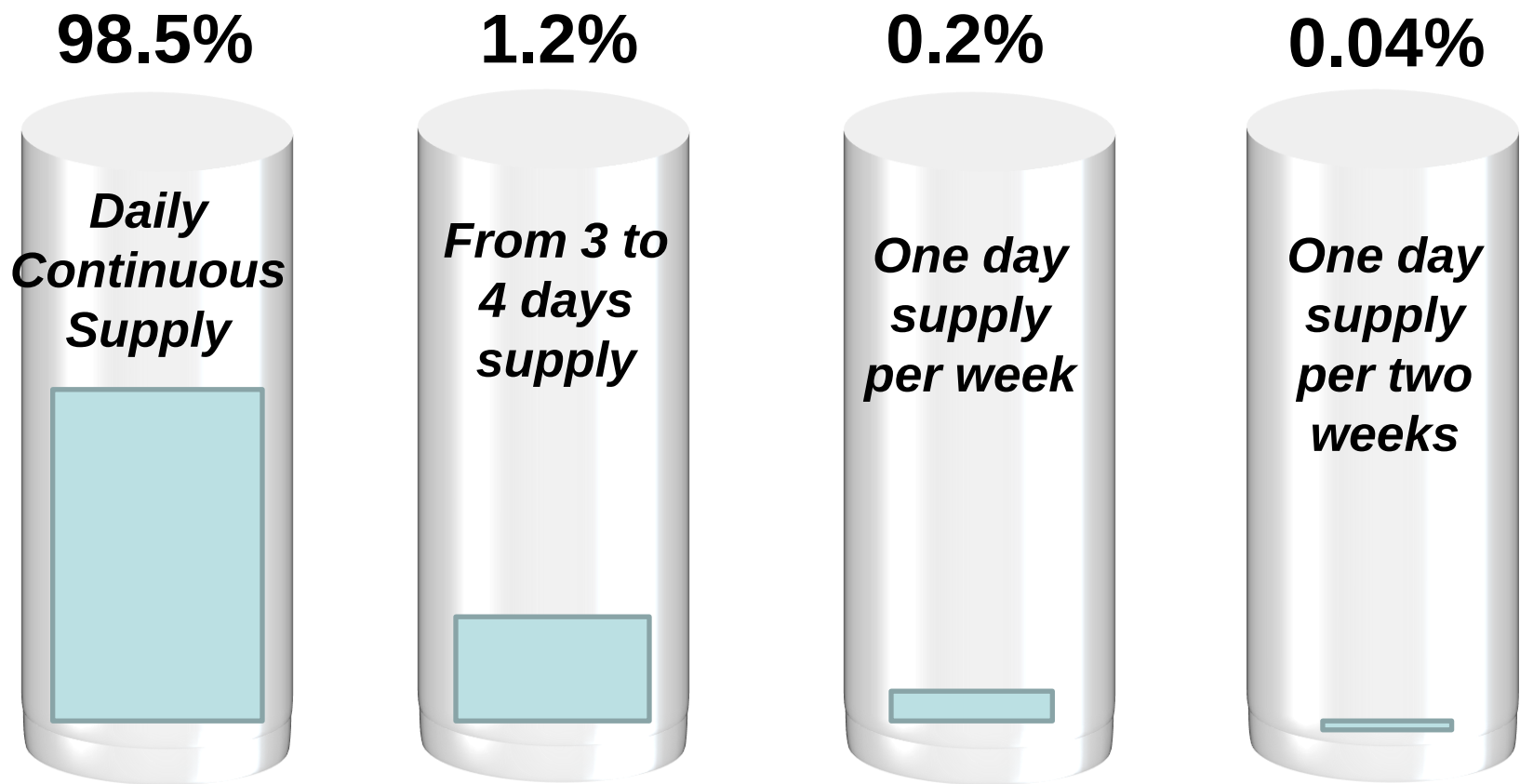
Holding Company for Water and Wastewater





Continuity of Water Supply - Water Networks (2012)

Measured by Population (1000 capita)

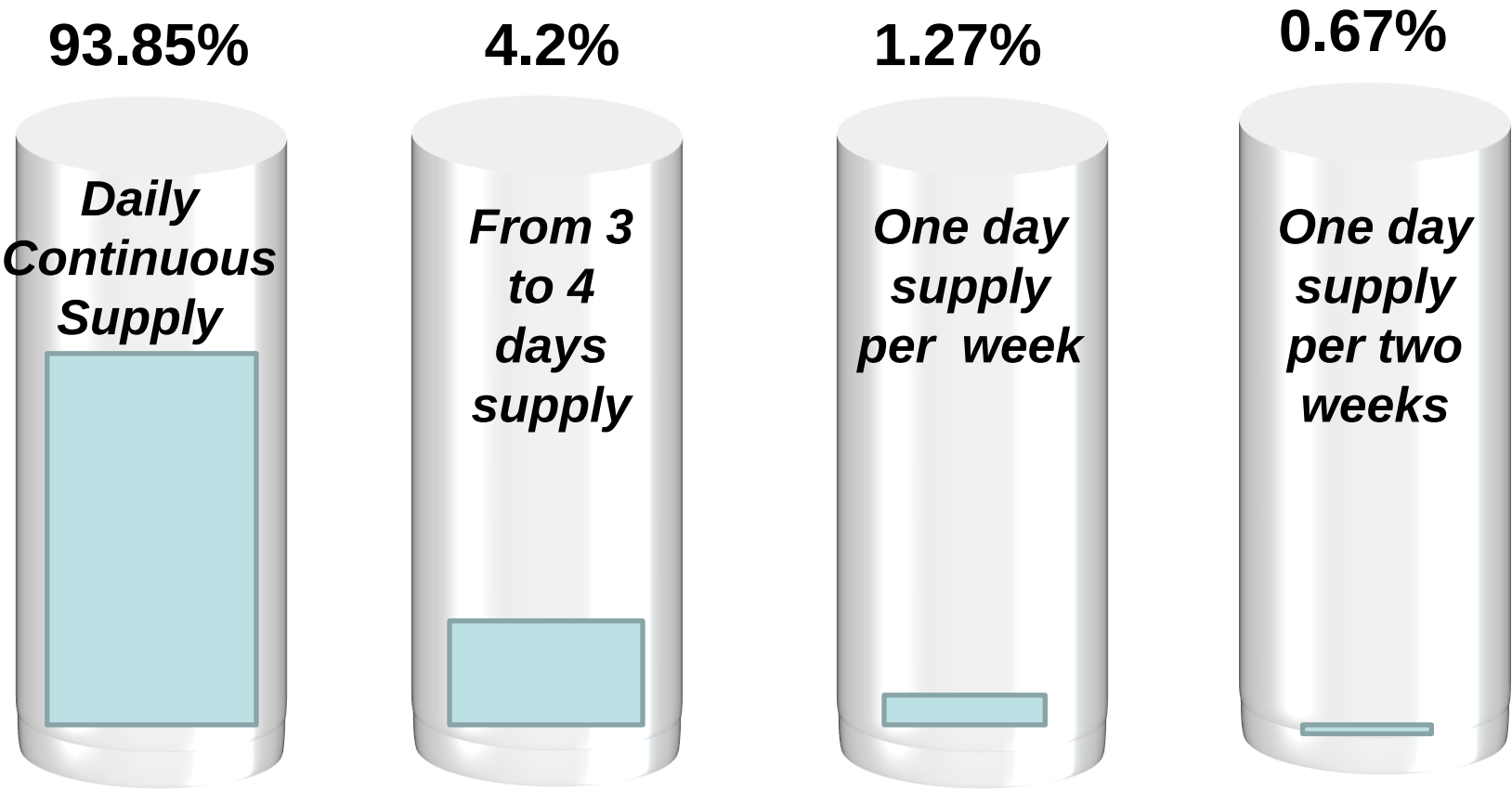


Total Population for Water Networks = 78 Million Capita



Continuity of Water Supply - Public Tap (2012)

Measured by Population (1000 capita)



Total Population for Public Tap =1 Million Capita



Continuity of Water Supply - Water Networks (2012) Measured by water quantity

Total Quantity Of **Produced** Water = 8381.6 Million m3/Year

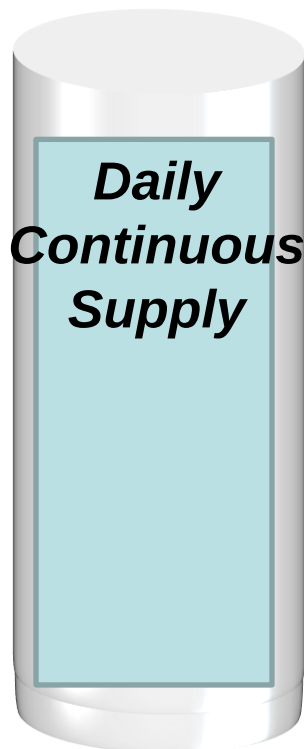
Total Quantity of **billed** for Water networks = 5664.2 Million m3/Year

98.25%

1.4%

0.26%

0.08%

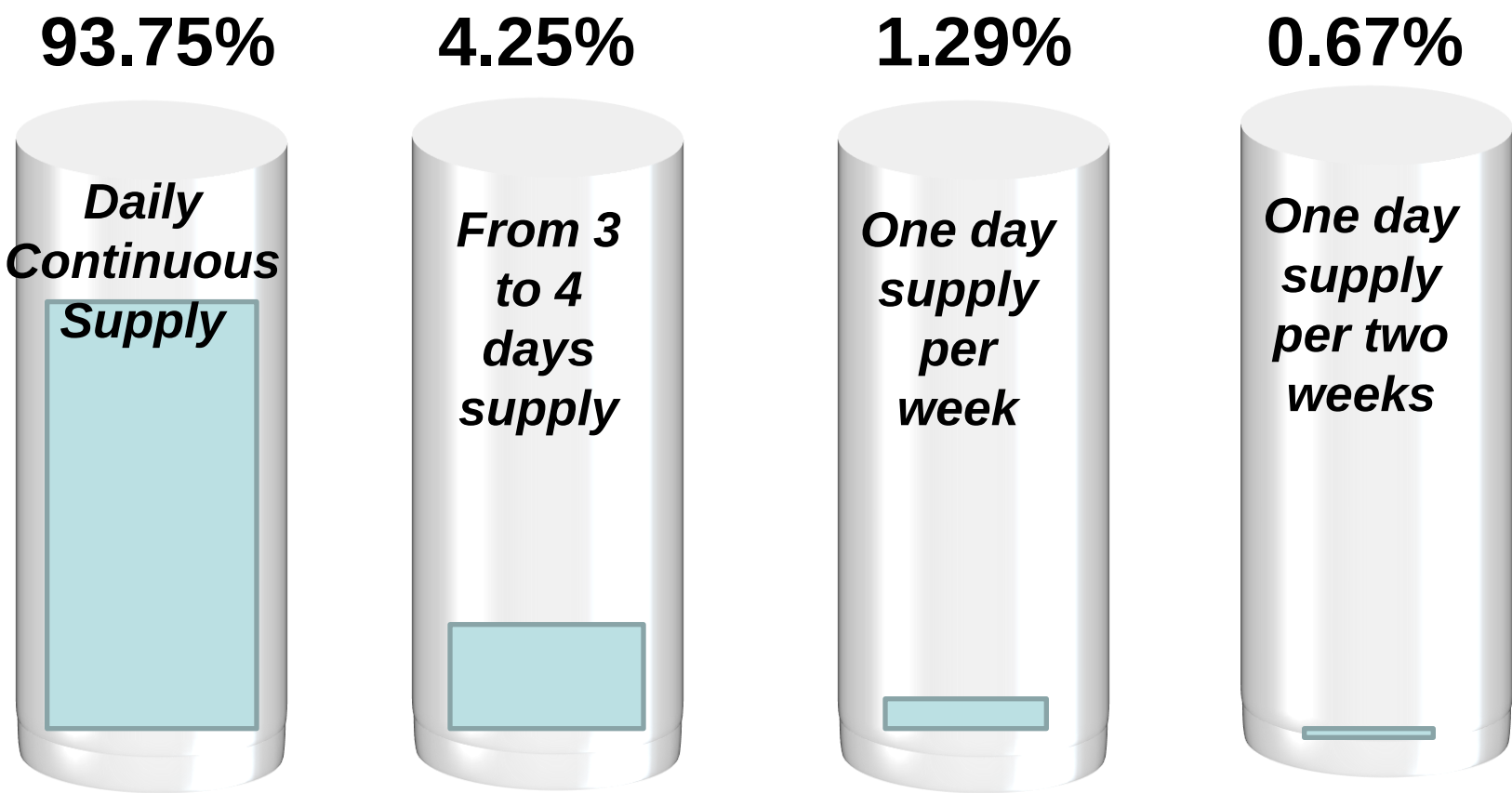


Total Quantity of Water Capacity **billed** for Water networks = 5664.2 Million m3/Year



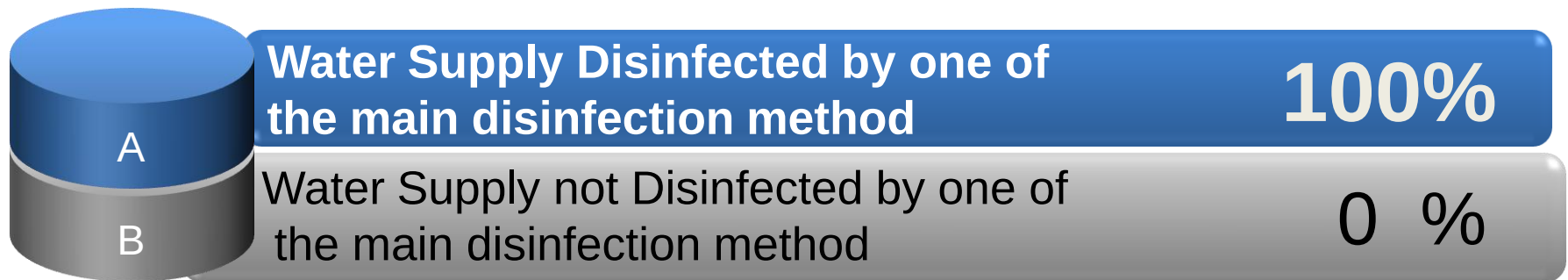
Continuity of Water Supply - Public Tap (2012)

Measured by water quantity (Million m³ per year)



Total Quantity of Water Capacity **billed** for Public Tap =12.8Million m3/Year

Water Quality (Year 2012)

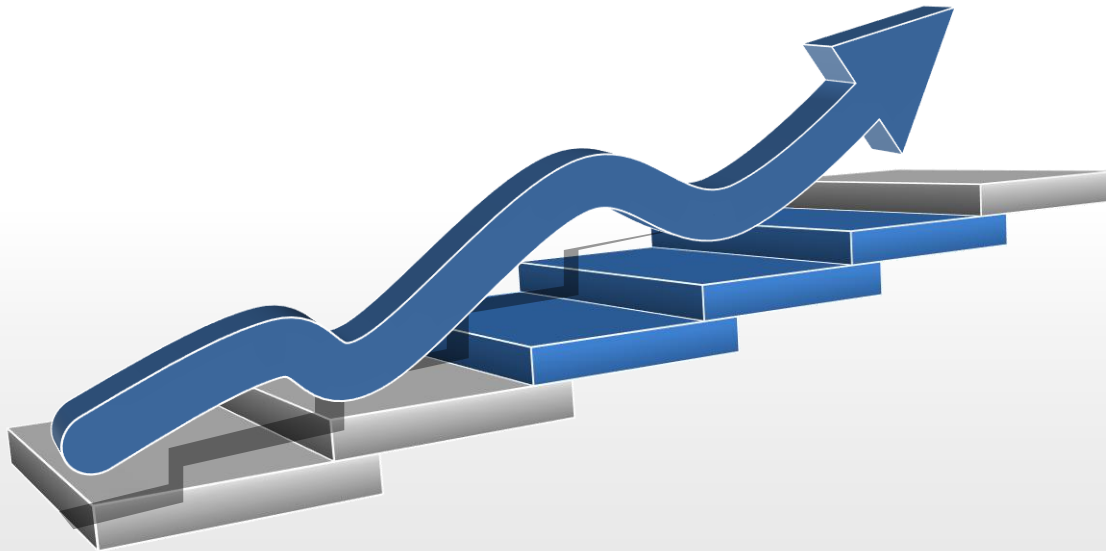


- **Total Population for water Network** = 78.09 Million Capita .
- **Total Population for Public Tap** = 1.1 Million Capita .
- **Total quantity of water for water Network** = 8381.68 Million m3/y.
- **Total quantity of water for Public Tap** = 289.7 Million m3/y.

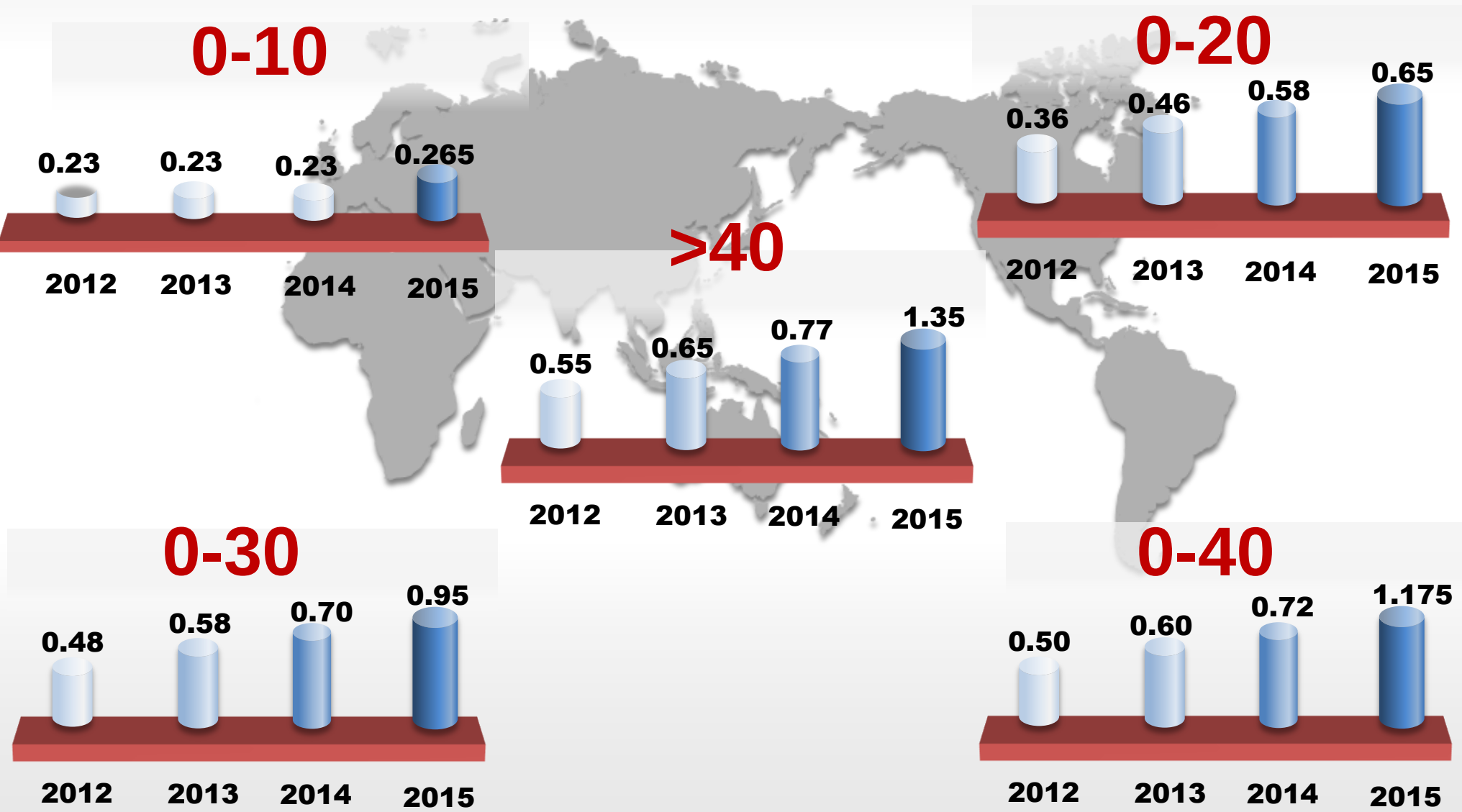
Tariff Structure (Year 2012)

Measured by Population

- **Variable Ascending Tariff = 78 Million capita**

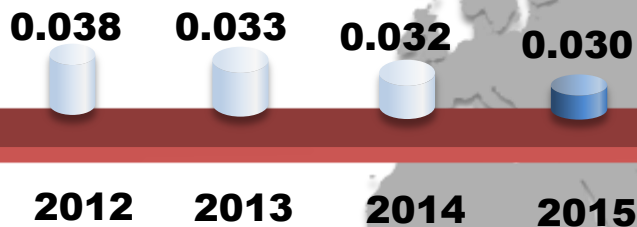


Different tariff with different segments of consumption (L.E)

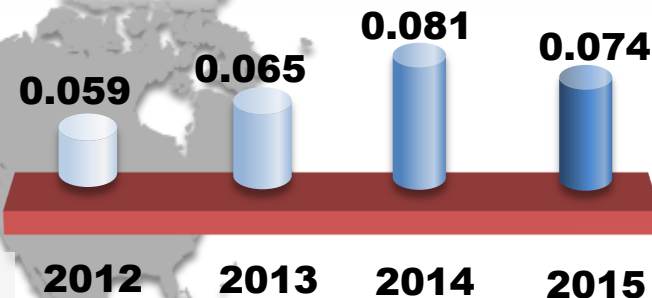


Different tariff with different segments of consumption (\$)

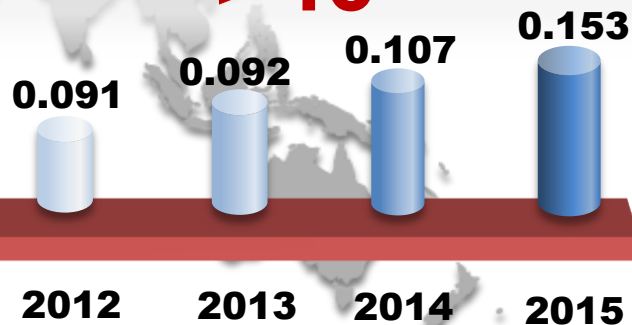
0-10



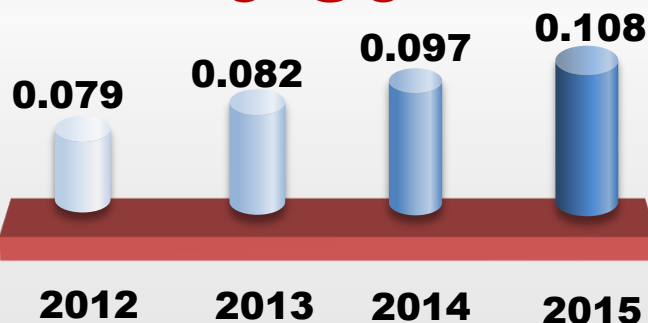
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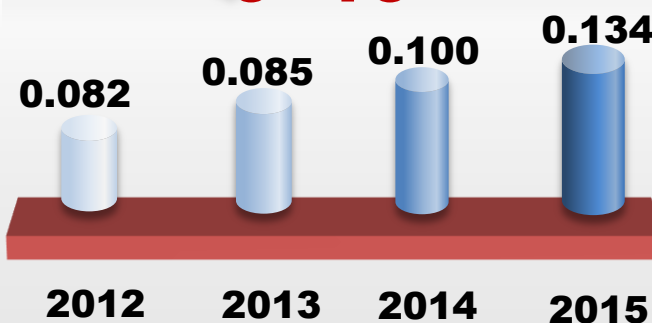
>40



0-30

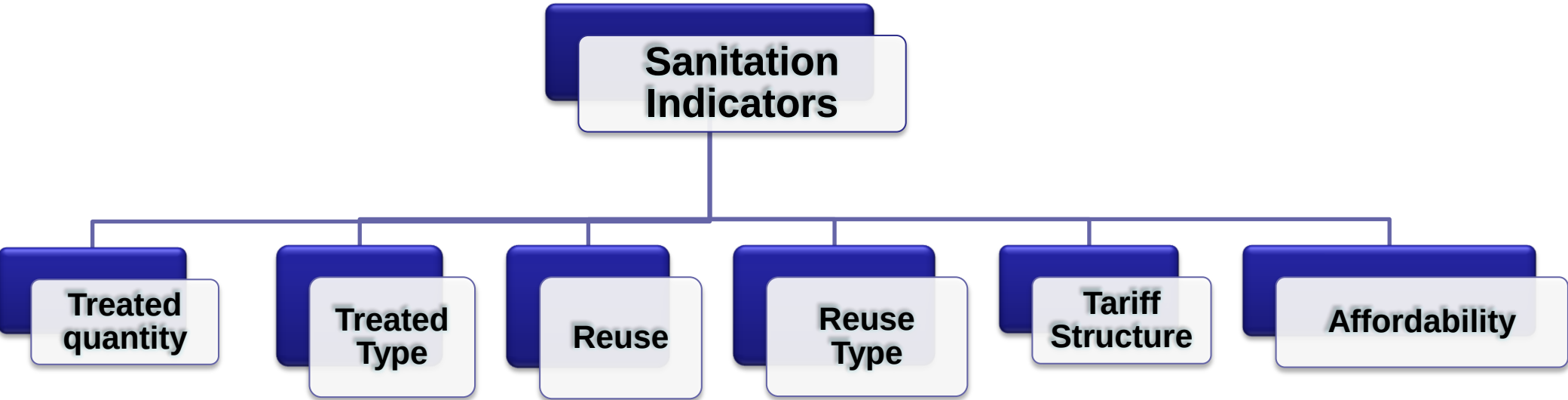


0-40



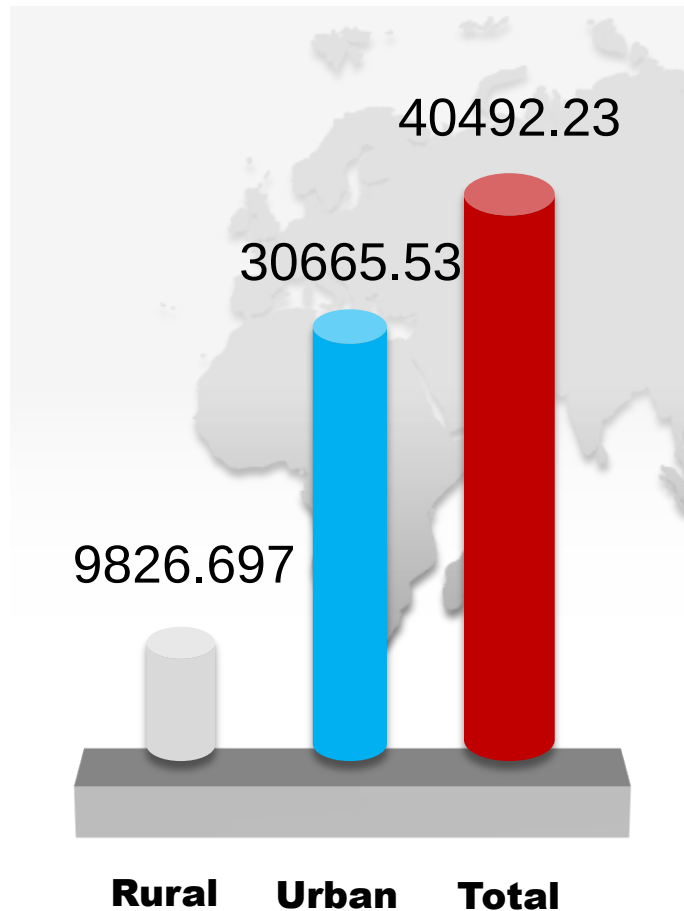


Holding Company for Water and Wastewater

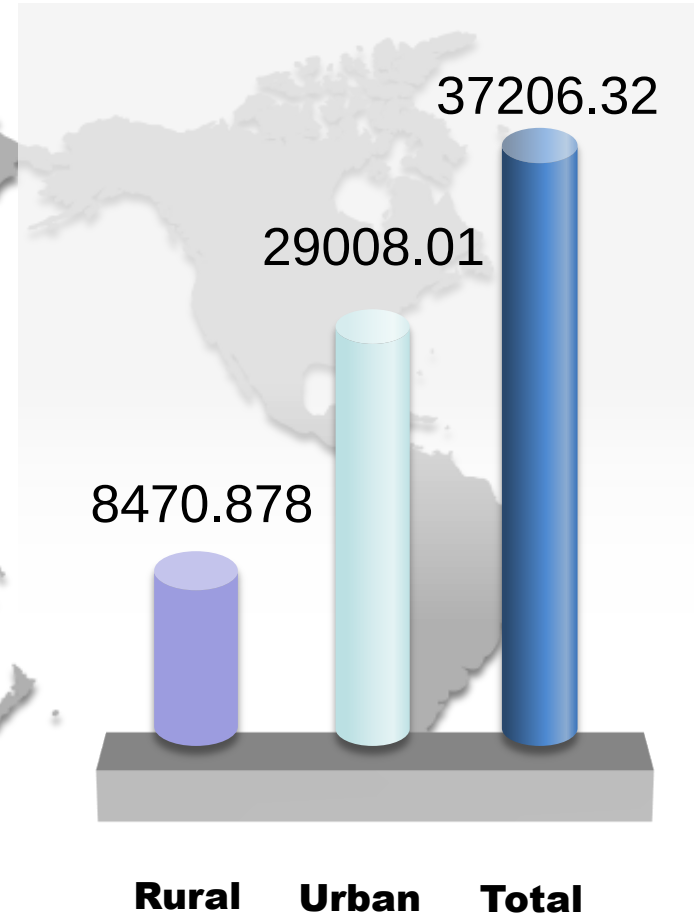


Treated Quantity (Year 2012)

According to population (1000 capita)



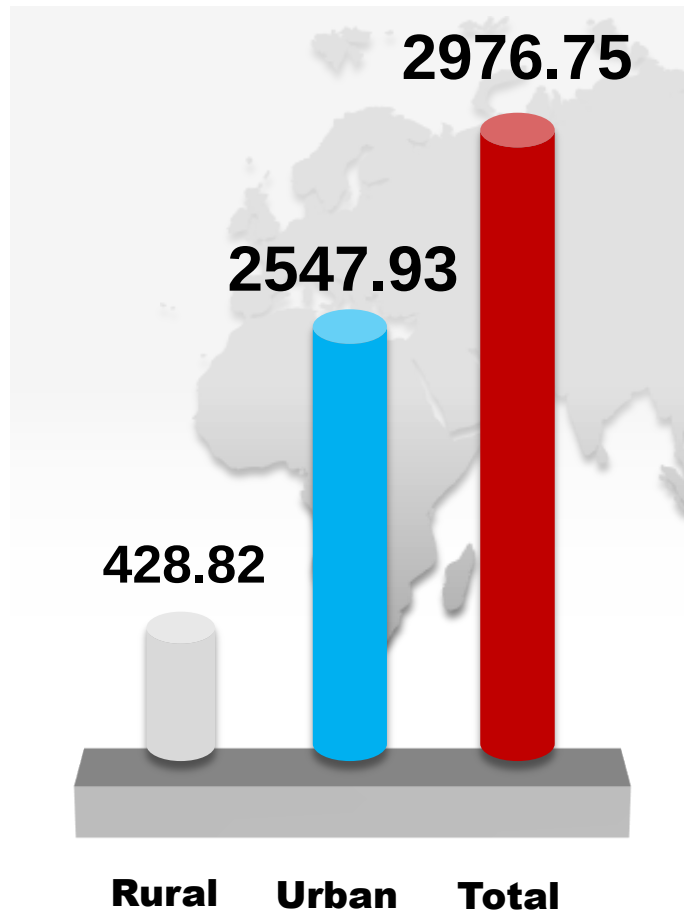
Population Served



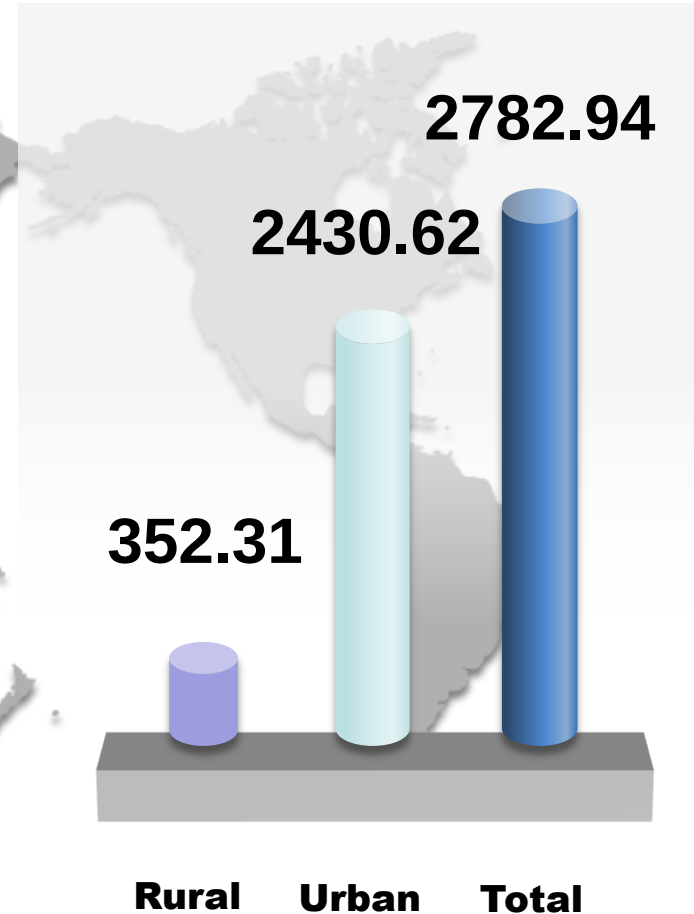
Population with Treated Sewage

Treated Quantity (Year 2012)

Measured by water quantity (Million m³ per year)



Quantity Of Collected Sewage

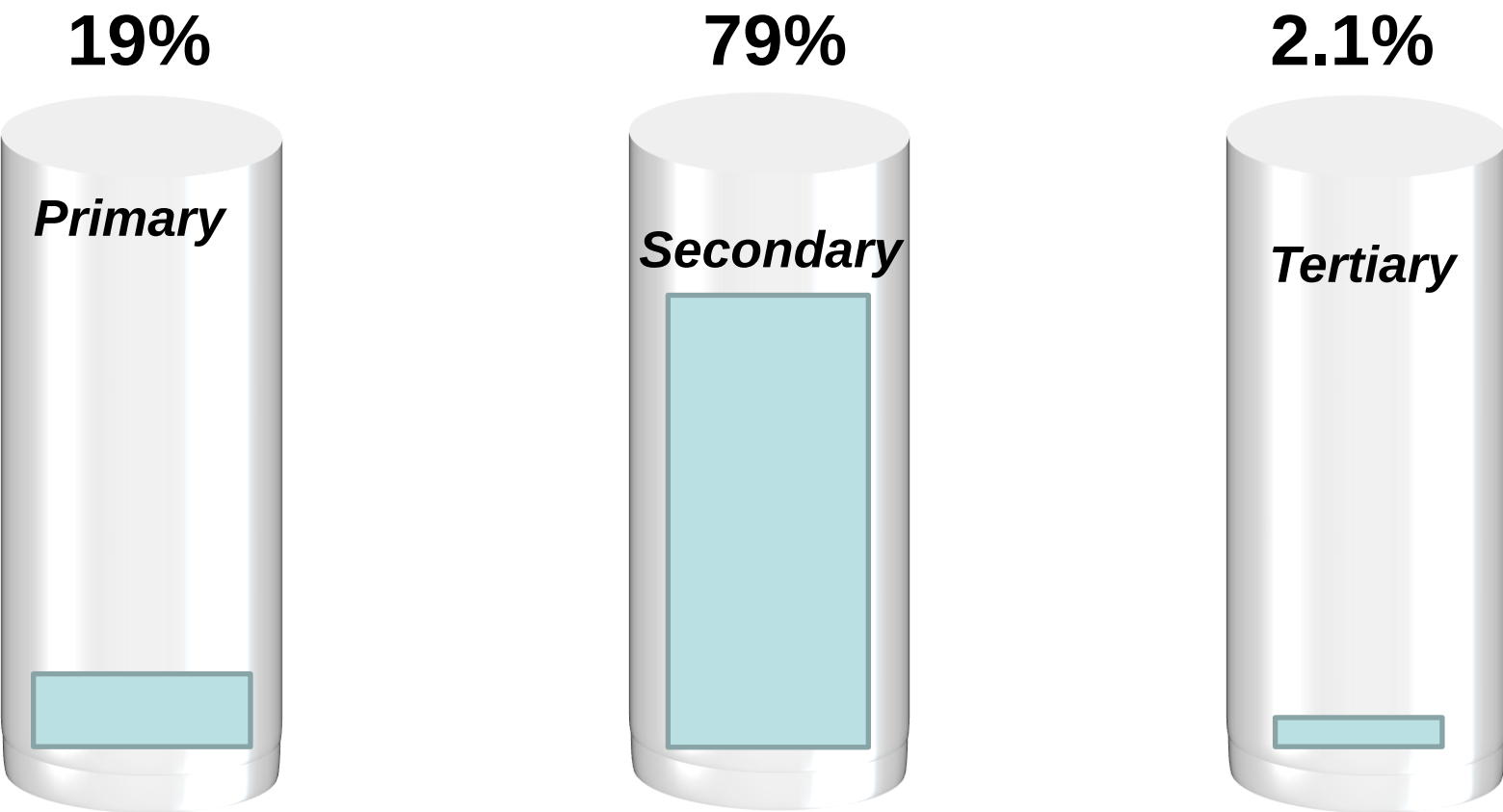


Quantity Of Treated Sewage



Treatment Type (Year 2012)

Measured by Population

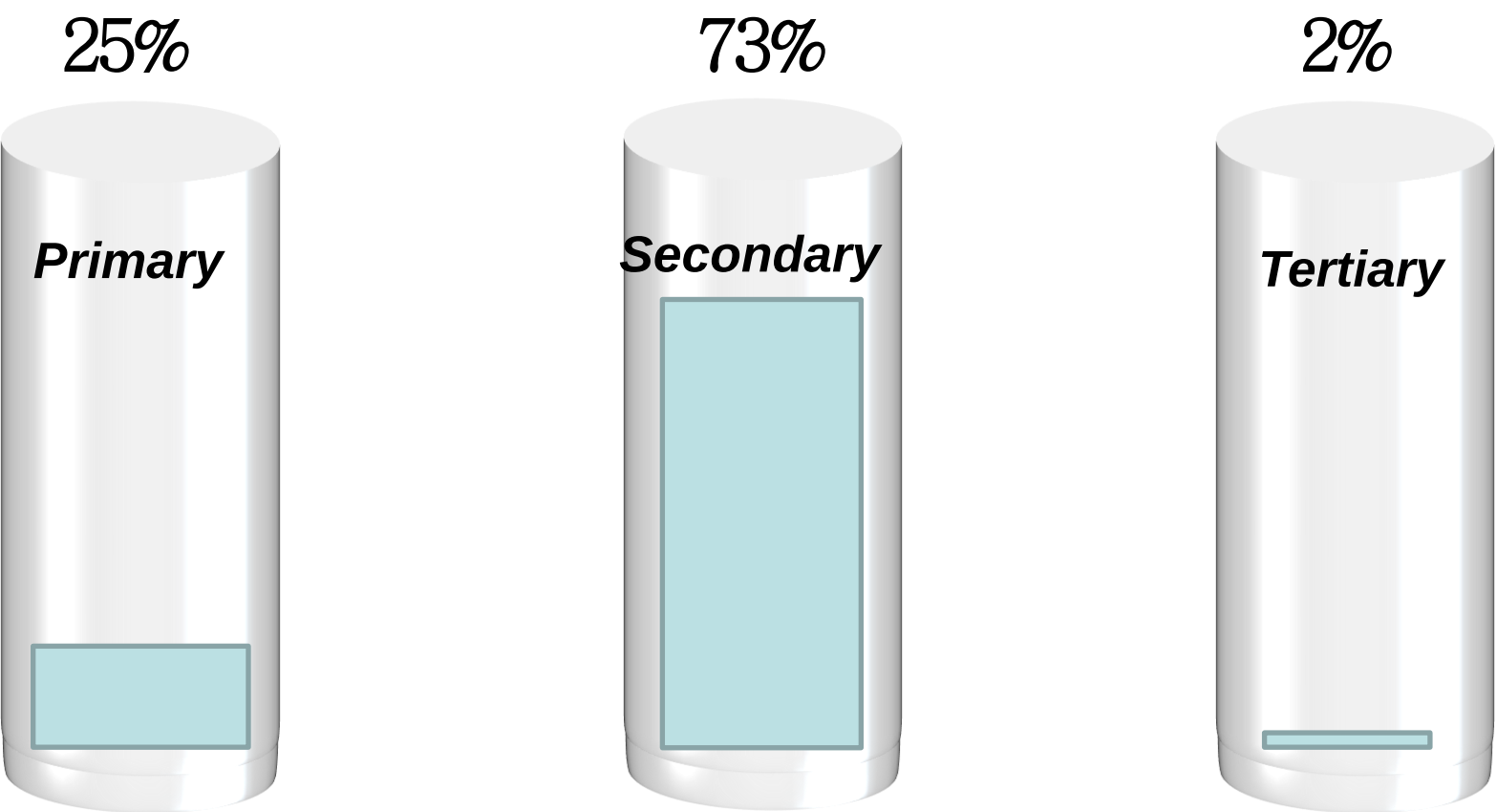


Total Population for Waste Water Networks = 37.206 Million Capita



Treatment Type (Year 2012)

Measured by Wastewater Quantity Unit Per Year

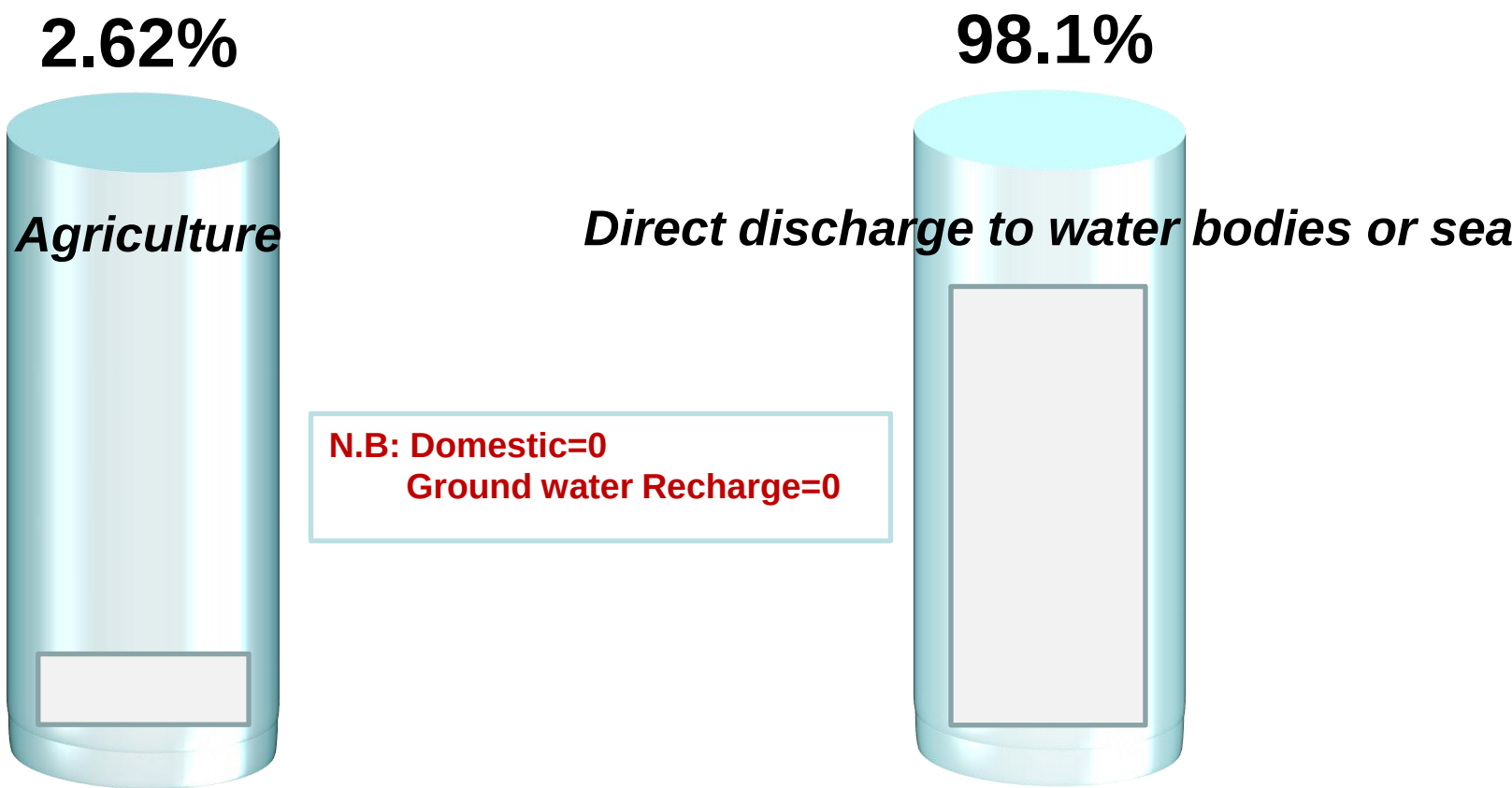


Total Treated Sewage =2782.94 Million m3/year



Reuse Fields After treatment (Year 2012)

Measured by Population

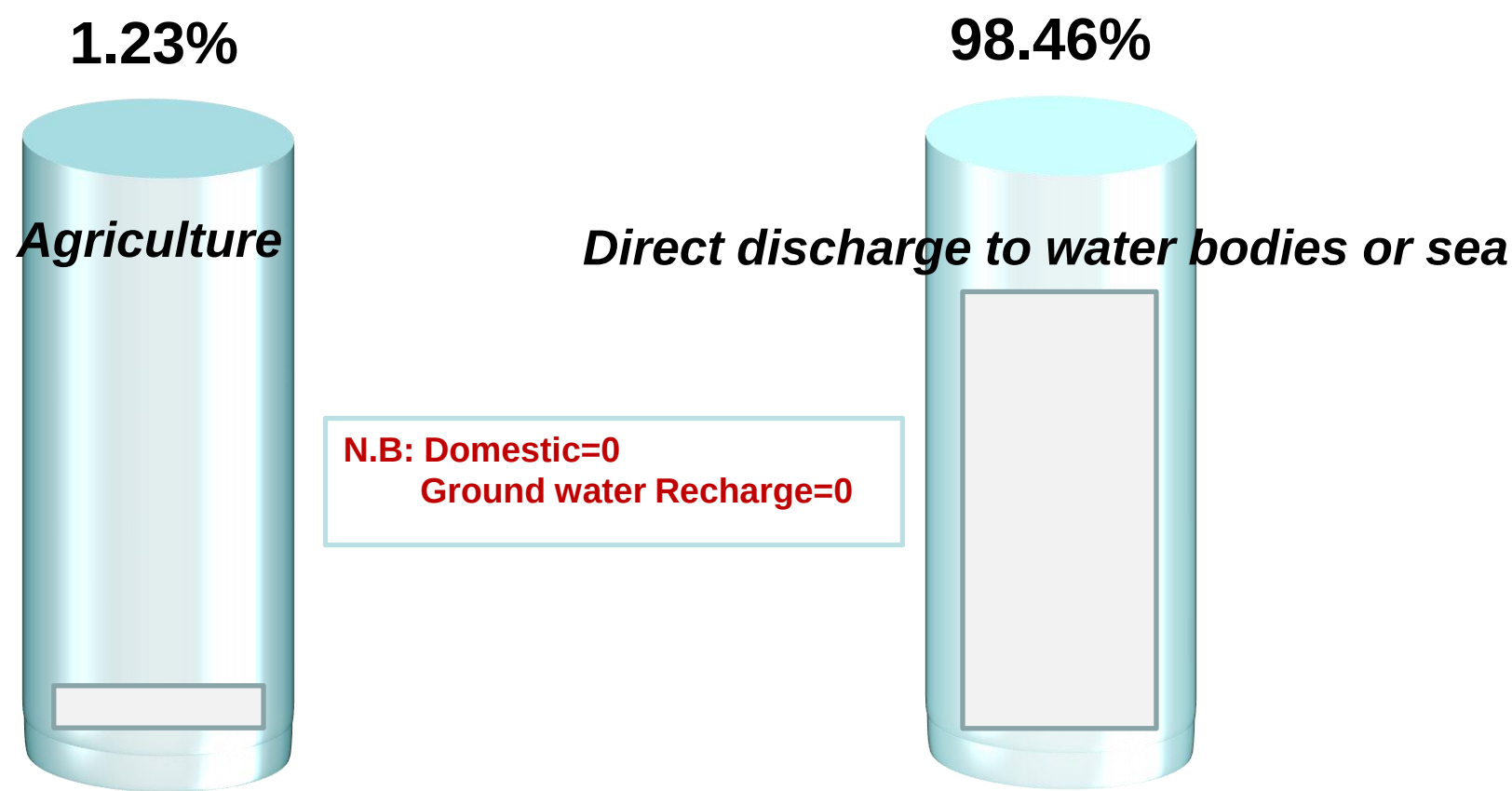


Total population =37.206 Million capita



Reuse Fields After Treatment (Year 2012)

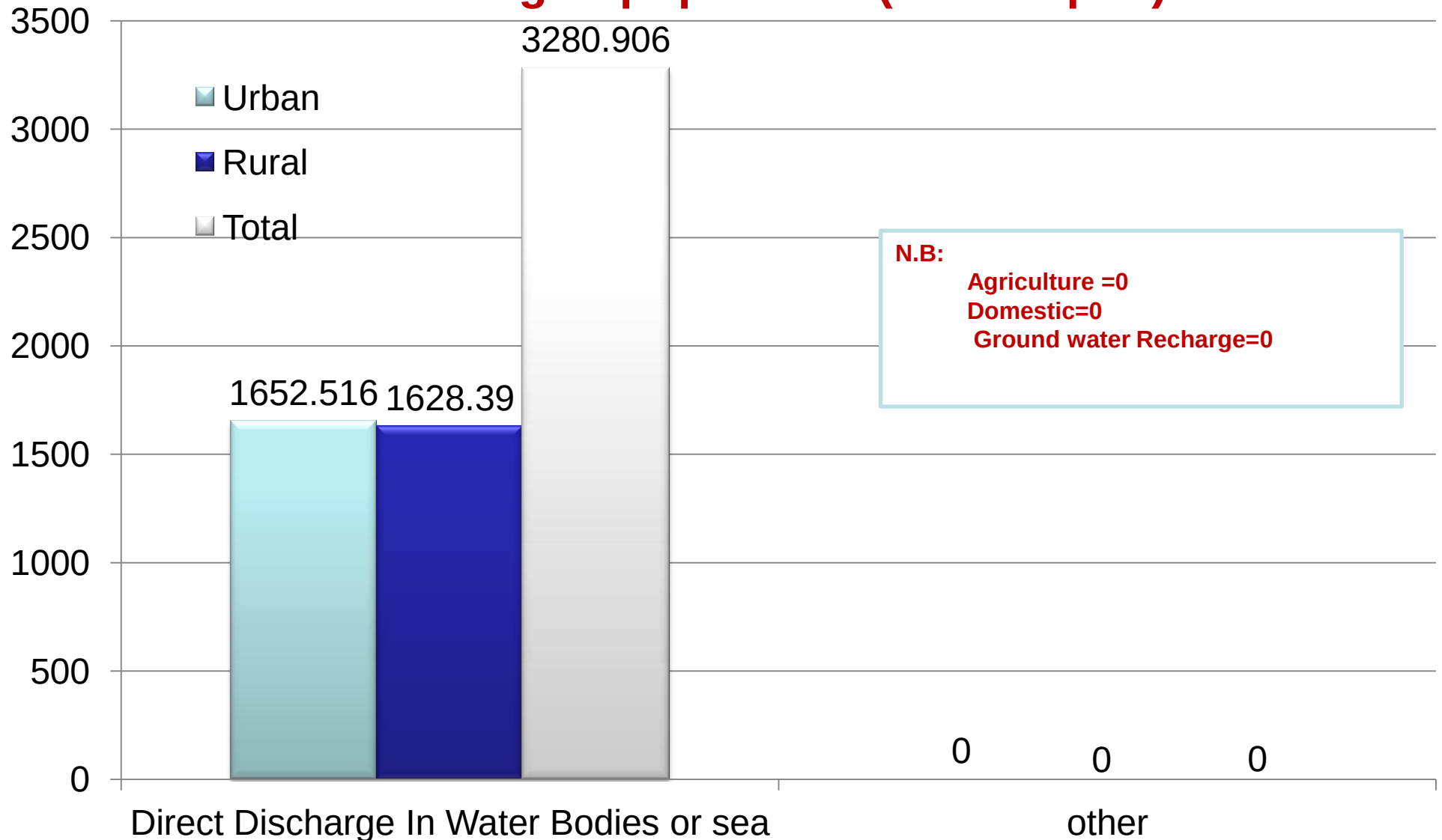
Measured by Wastewater Quantity per year



Total Treated Sewage =2782.94 Million m3/year

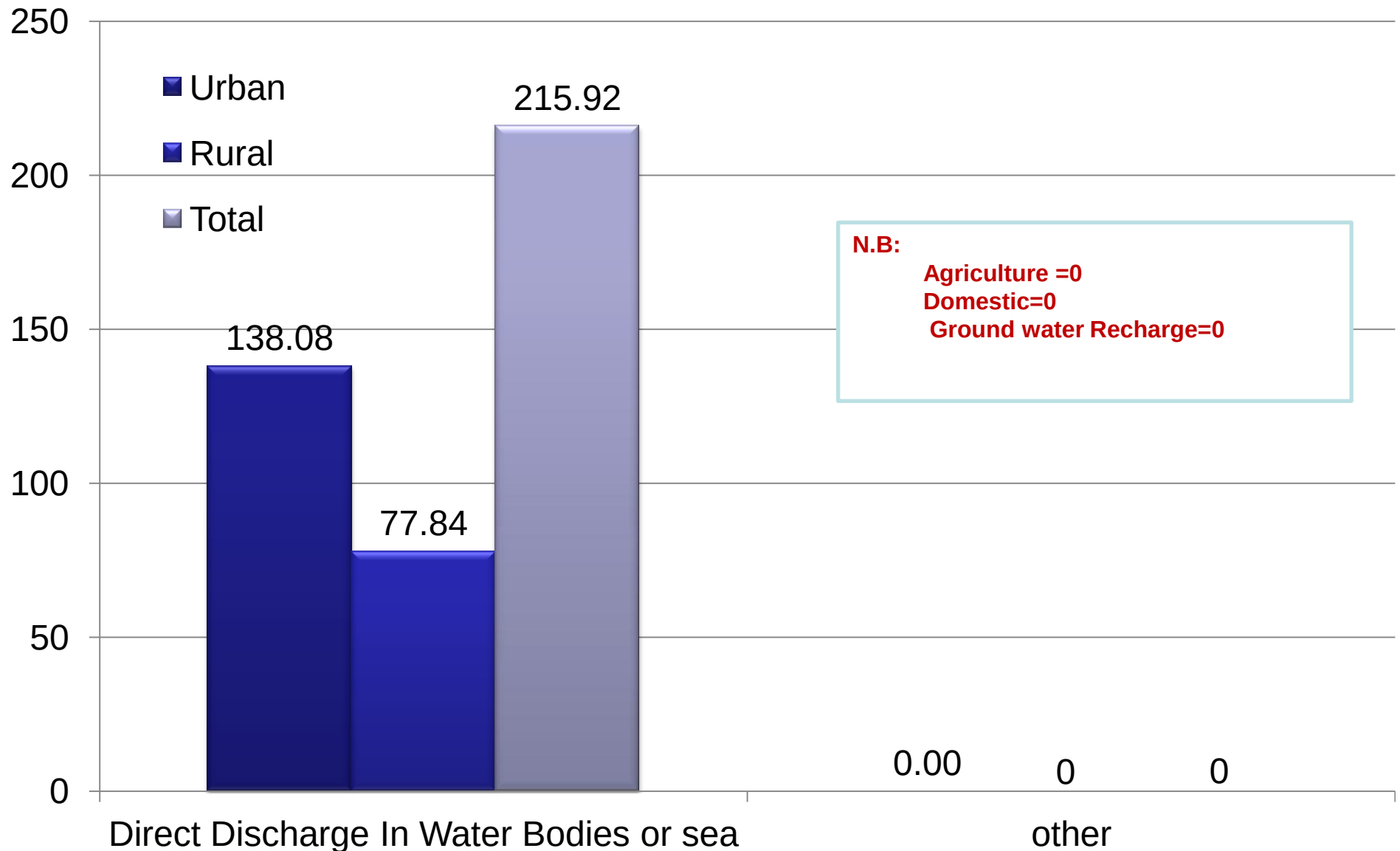
Reuse Fields for non-treated sewage (Year 2012)

According to population (1000 capita)



Reuse Fields for non-treated sewage (Year 2012)

According to water quantity per year



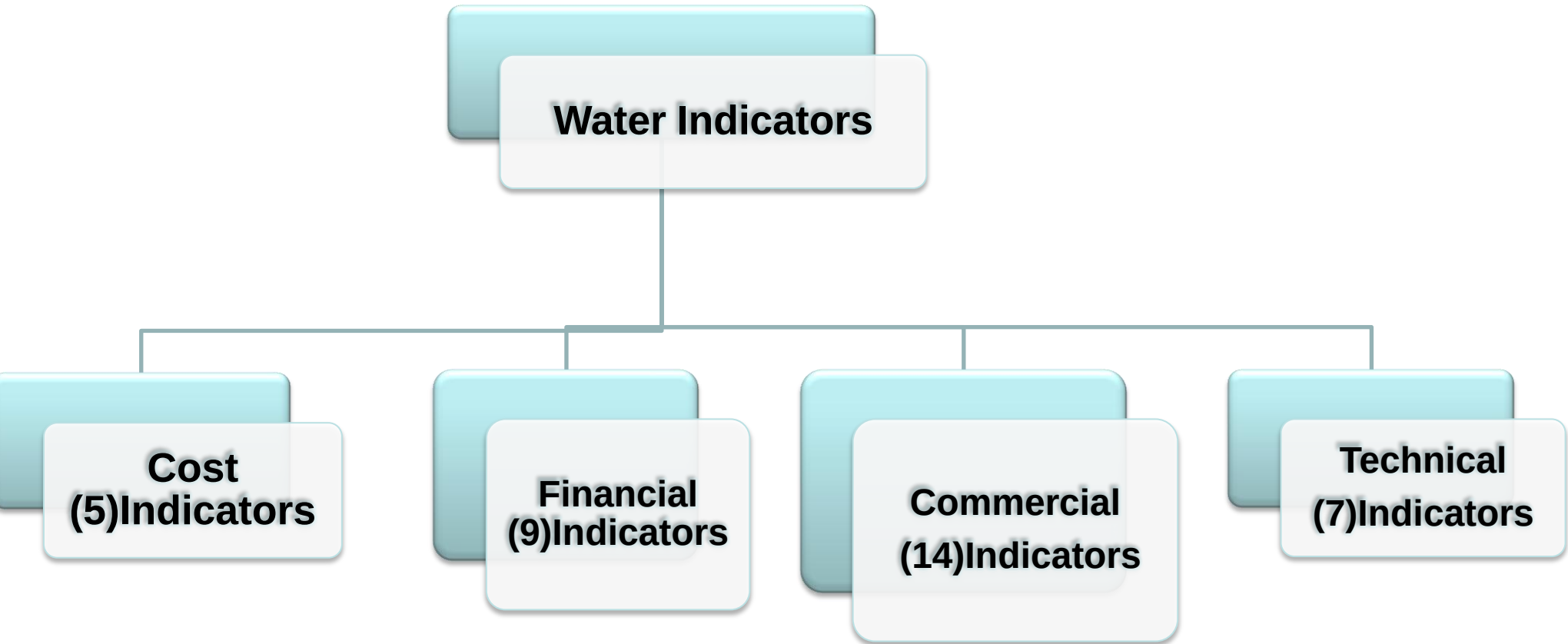


Holding Company for Water and Wastewater

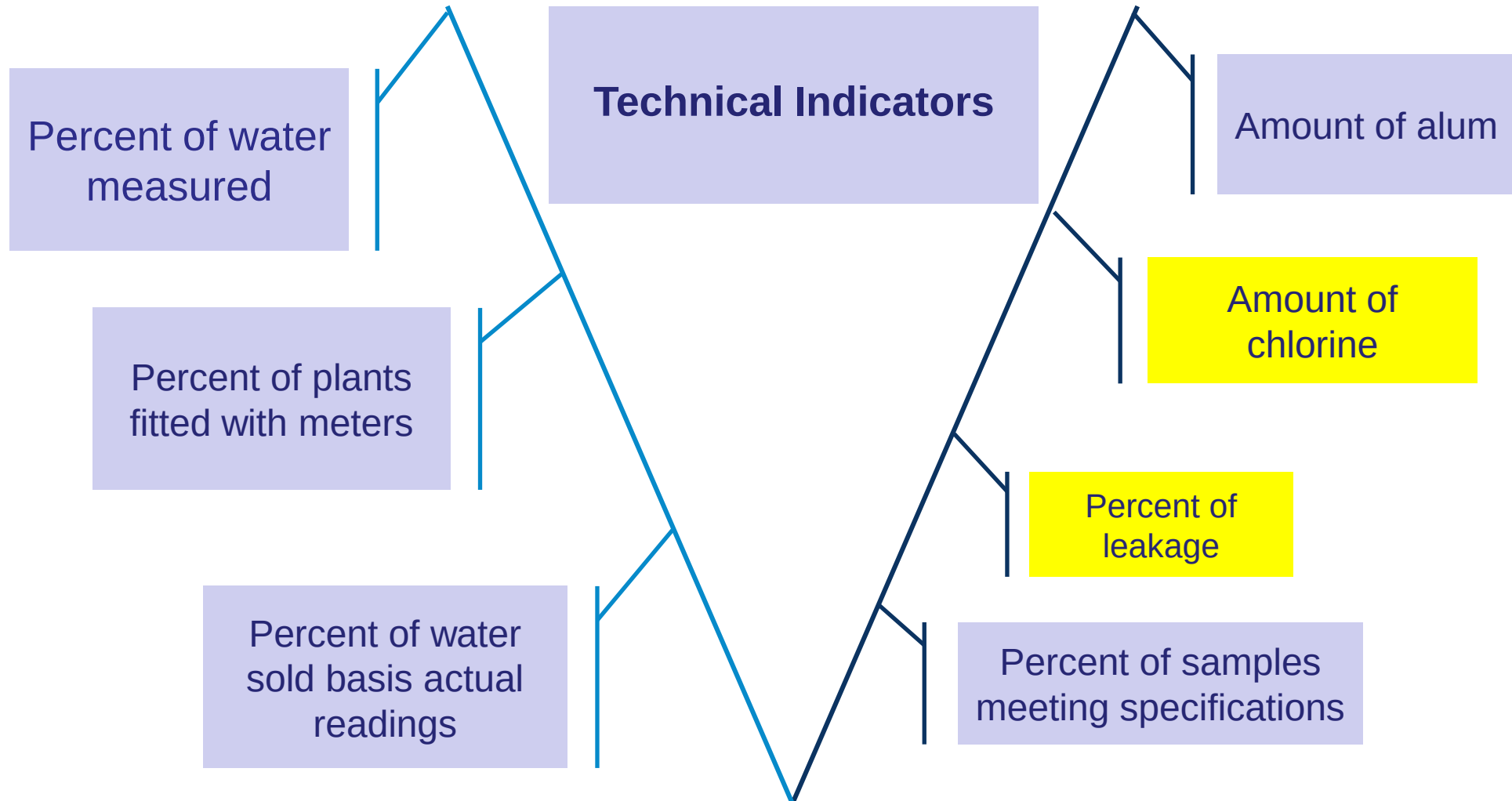
Egypt Performance Indicators



Holding Company for Water and Wastewater



Water Indicators

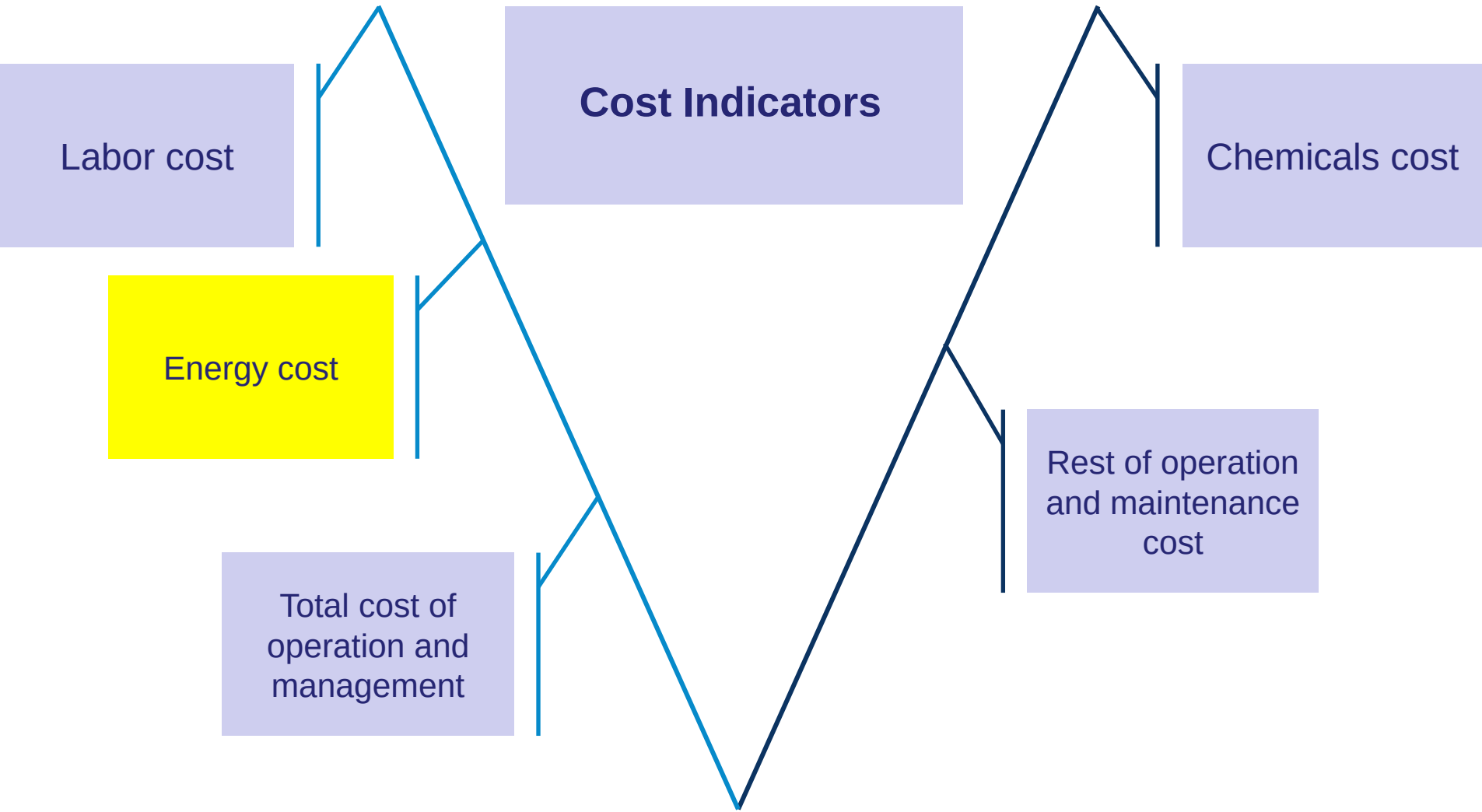




Holding Company for
Water and Wastewater

Holding Company for Water and Wastewater

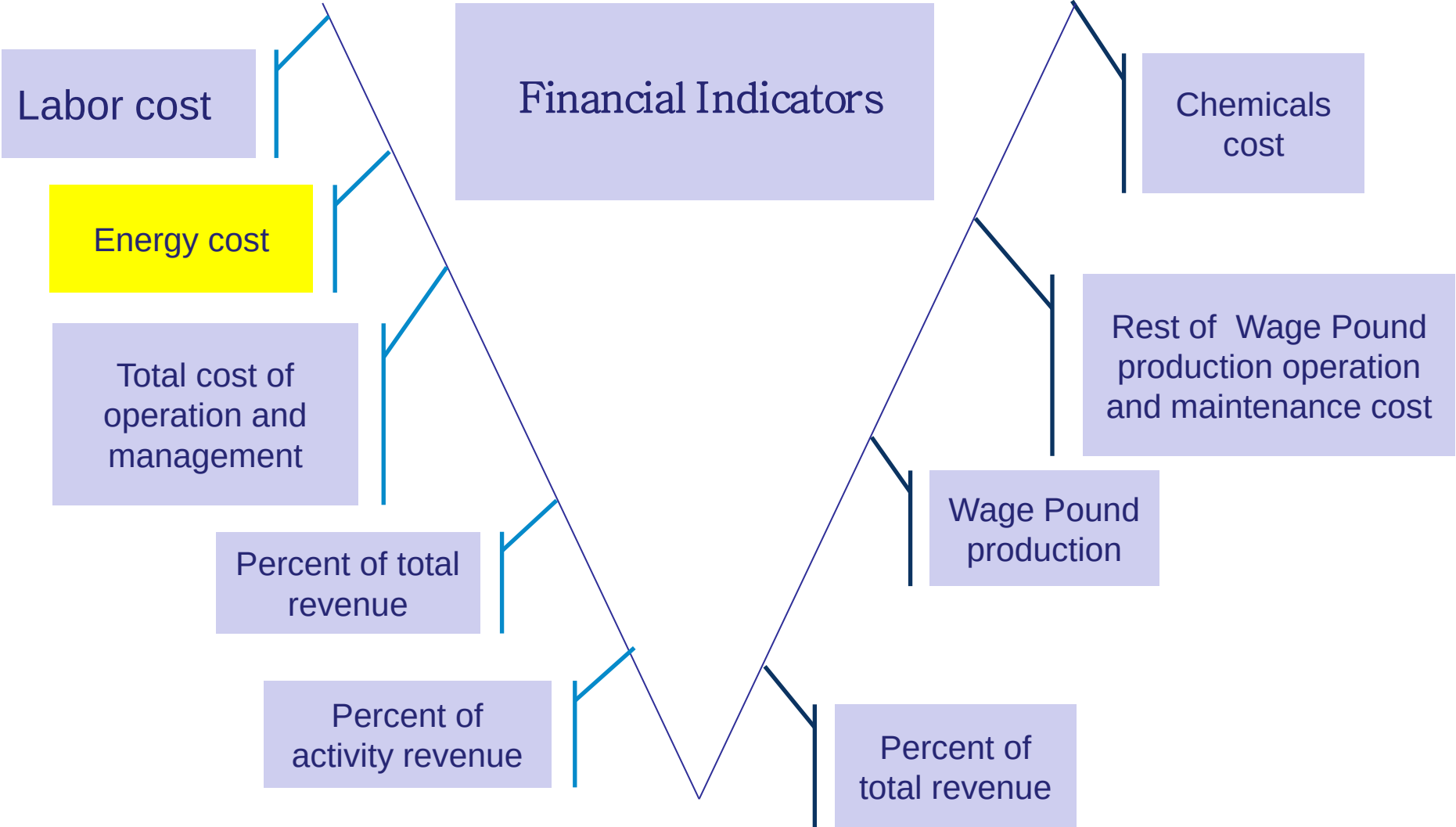
Water Indicators





Holding Company for Water and Wastewater

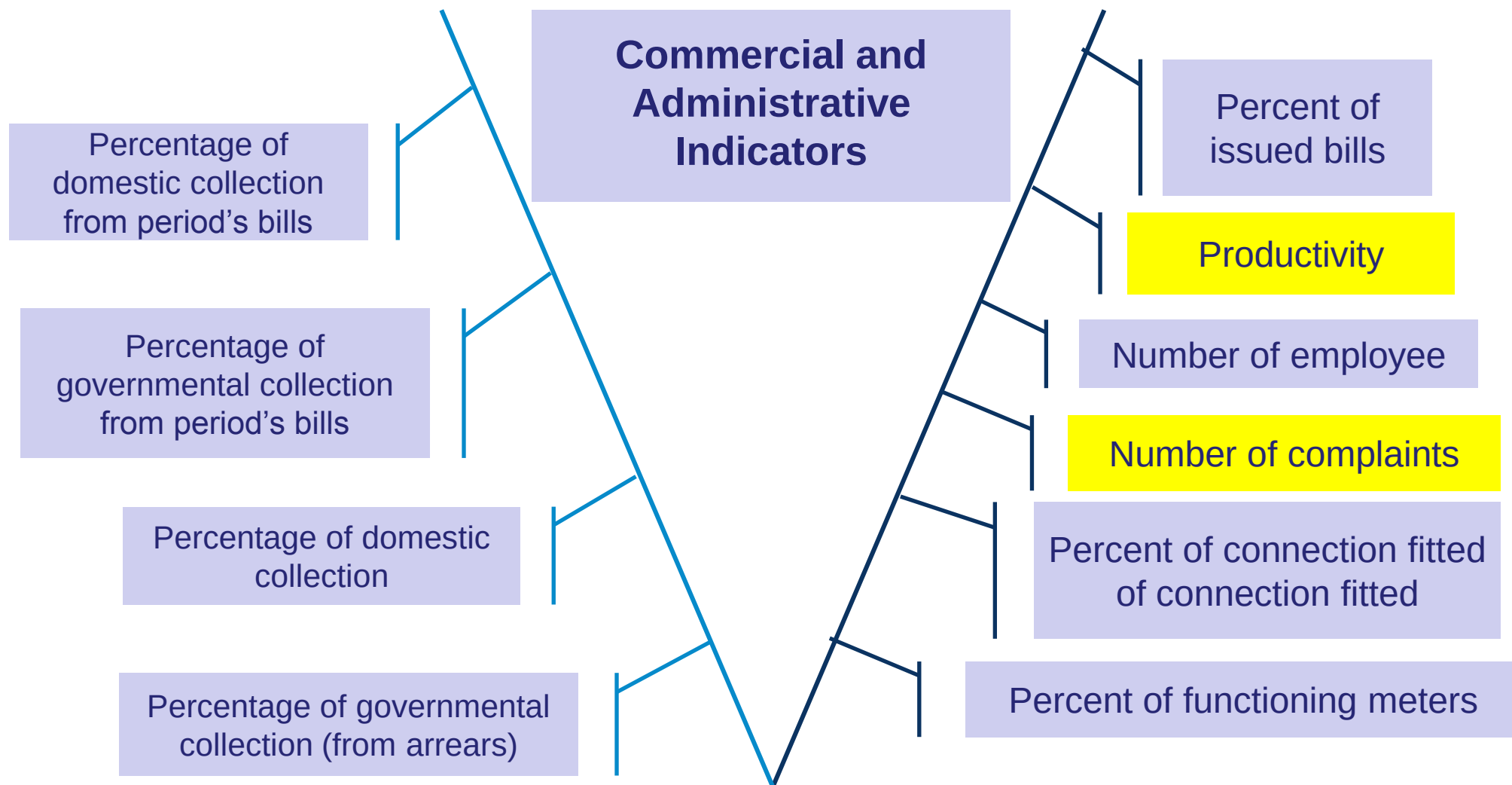
Water Indicators





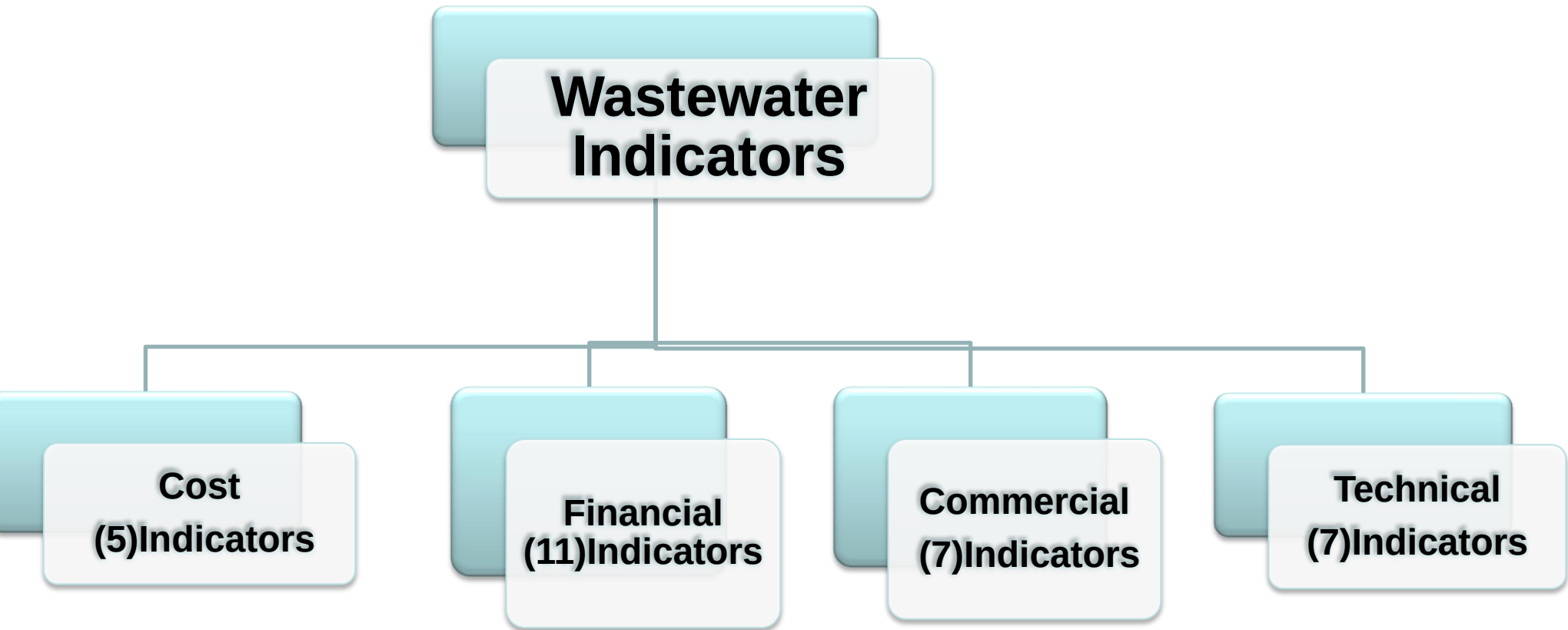
Holding Company for Water and Wastewater

Water Indicators

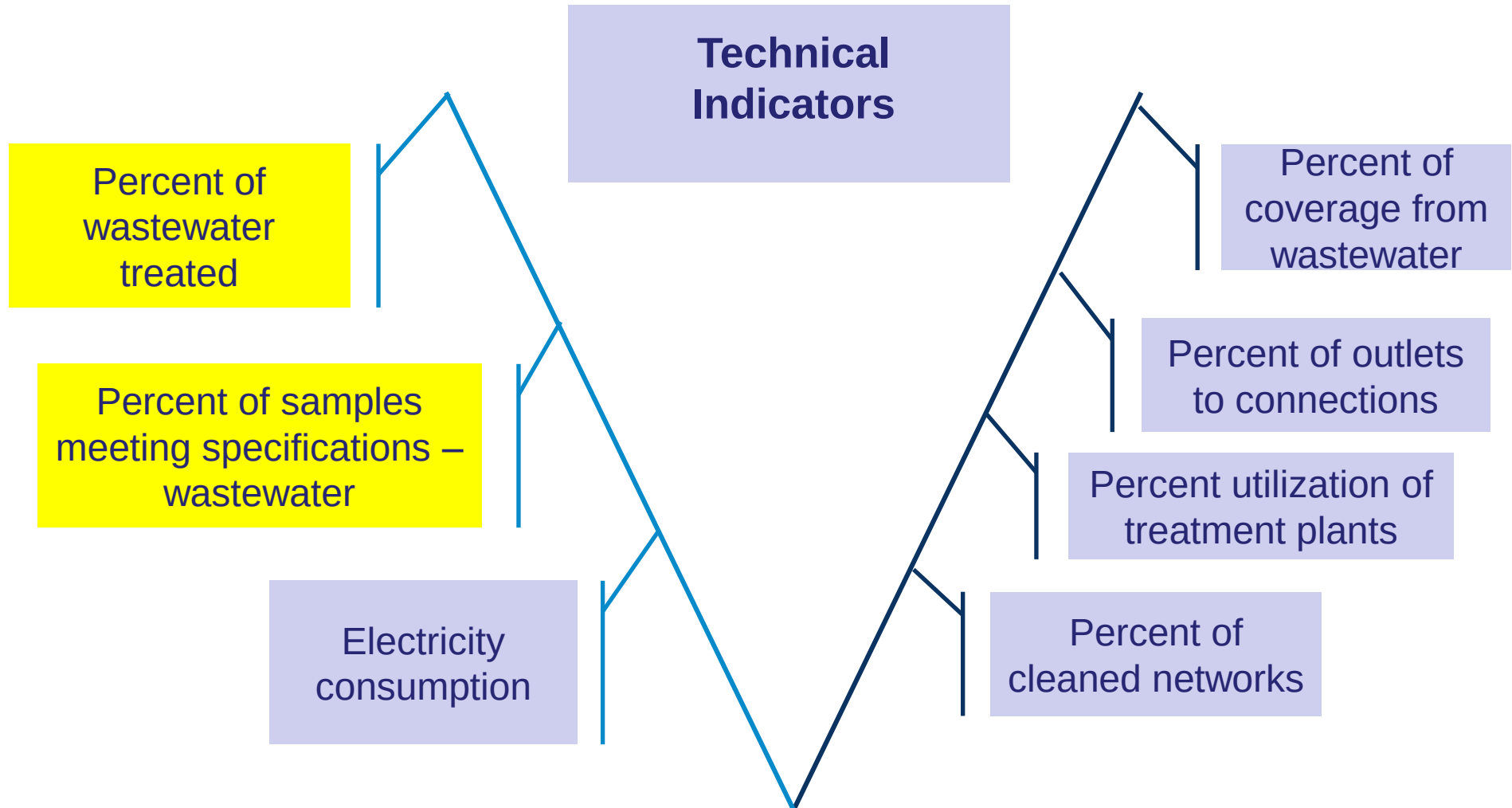




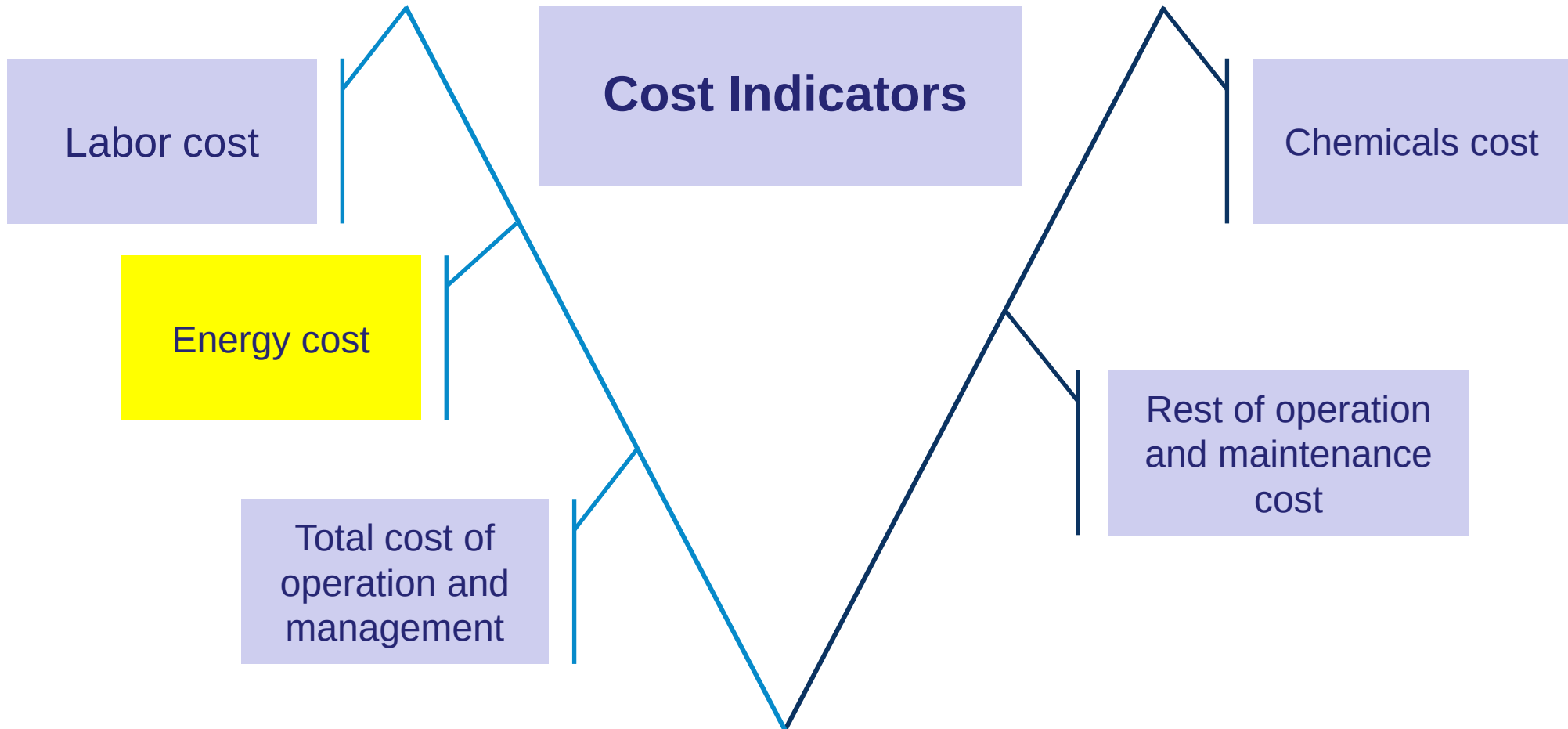
Holding Company for Water and Wastewater



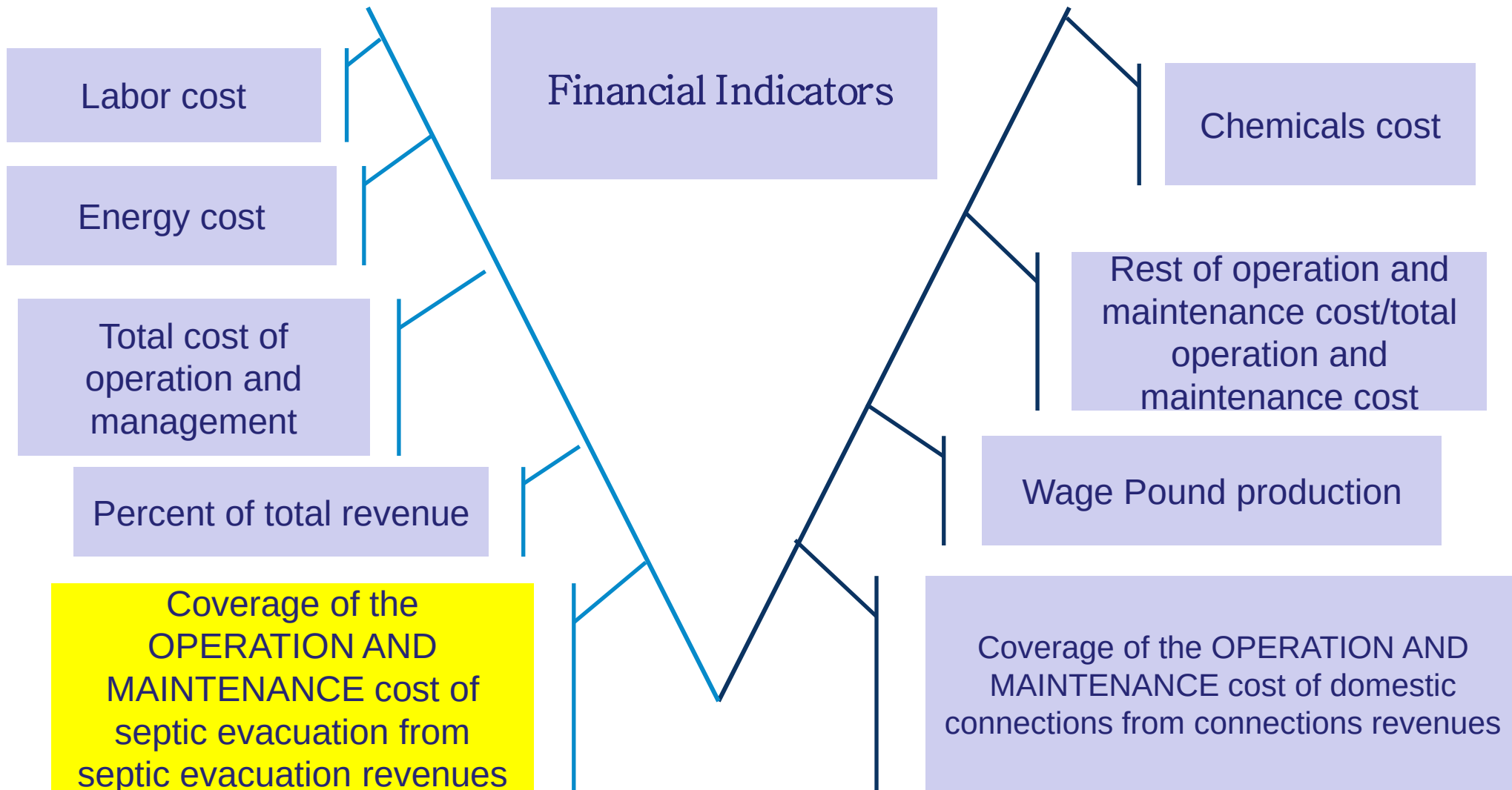
Wastewater Indicators



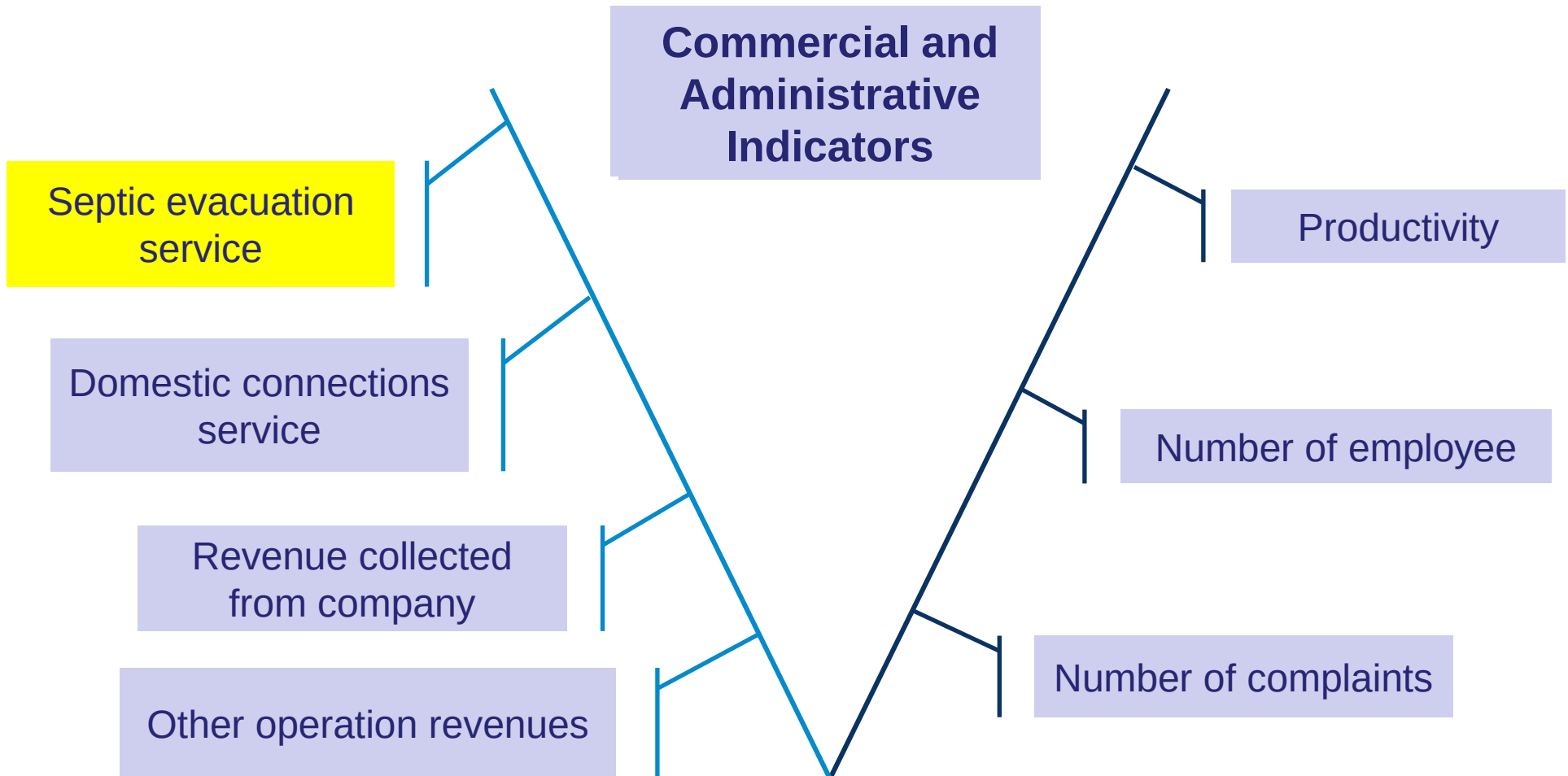
Wastewater Indicators



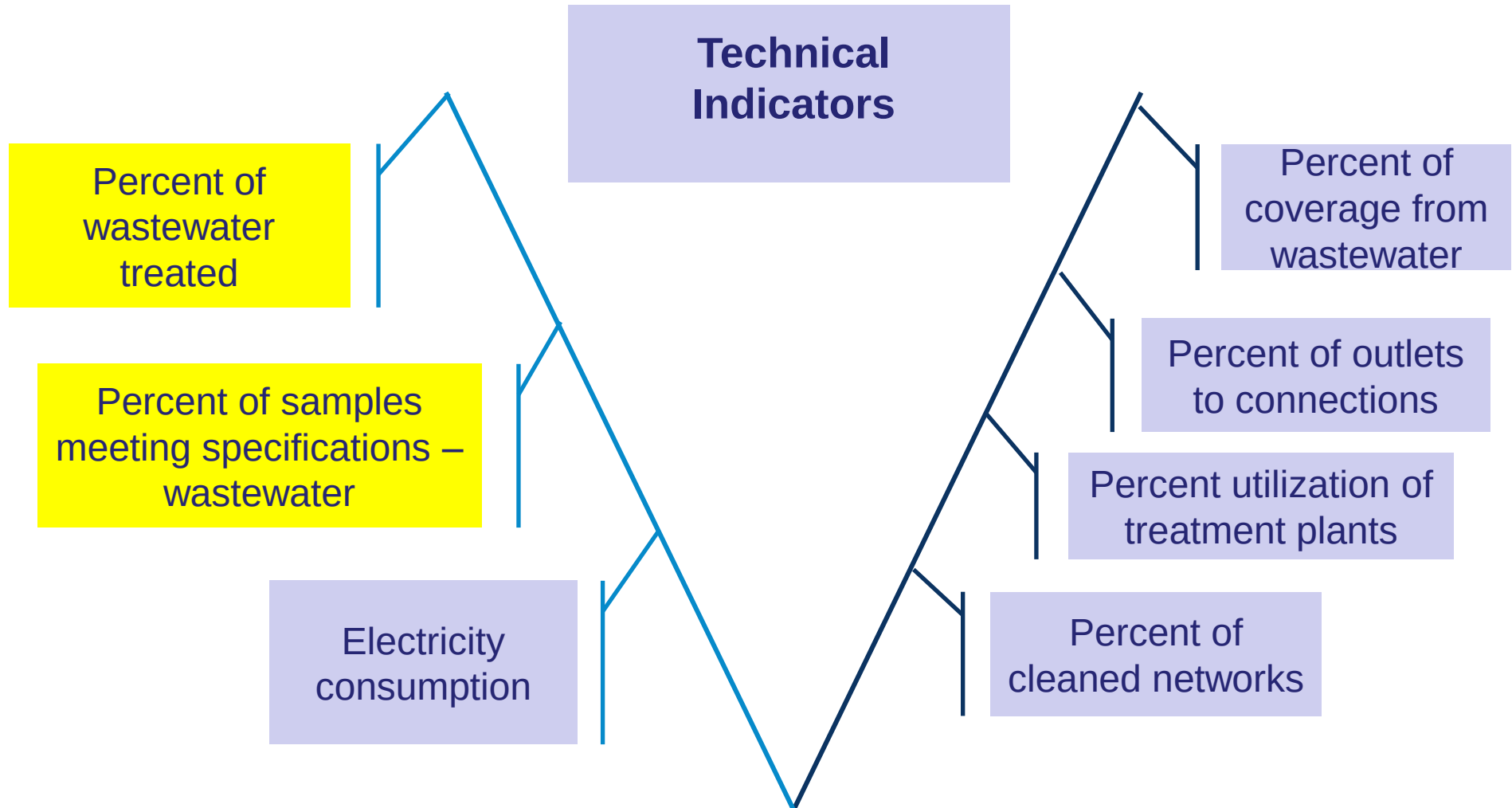
Wastewater Indicators



Wastewater Indicators



Wastewater Indicators



Lessons Learned

1

Sewage Tariff In Egypt is a percentage from Water Bill & there is no constant value (no direct charge) for Sewage Tariff.

2

Water leakage mentioned includes physical leakage & illegal connections so it's hard to separate the two values, and this should be considered when calculating efficiency

3

Population data needed for year 2012 based on mathematical & geometric method, as the last official census is from the year 2006; and some cases it is necessary to make a survey to check the actual population & household size figures, which is not easy.



Challenges

4

It is hard to determine the served population by public taps, and definition of served and un-served differs in Egypt from international definitions.

5

Meters in Egypt are not a reflection of the number of subscribers; and it is hard to determine population served from data collected from meters.

6

Definition and differentiation between *urban* and *rural* is a challenge; proposed to consider alternative of *on-network* and *off-network*





Holding Company for Water and Wastewater

Thank you

