

The water tariff system in Romania

Teodor Popa
Romanian Water Association

Brasov, Romania

Romanian water sector key figures

- ▶ Joined EU in 2007
- ▶ Total population: approx. 21 mil. (3- 4 mil. abroad)
- ▶ Danube basin (38% of total length)
- ▶ Total water resources: 2660 m³/cap/year
(Europe average= 4000) rank 9/ 25
(Surface water resources: 1700 m³ only)



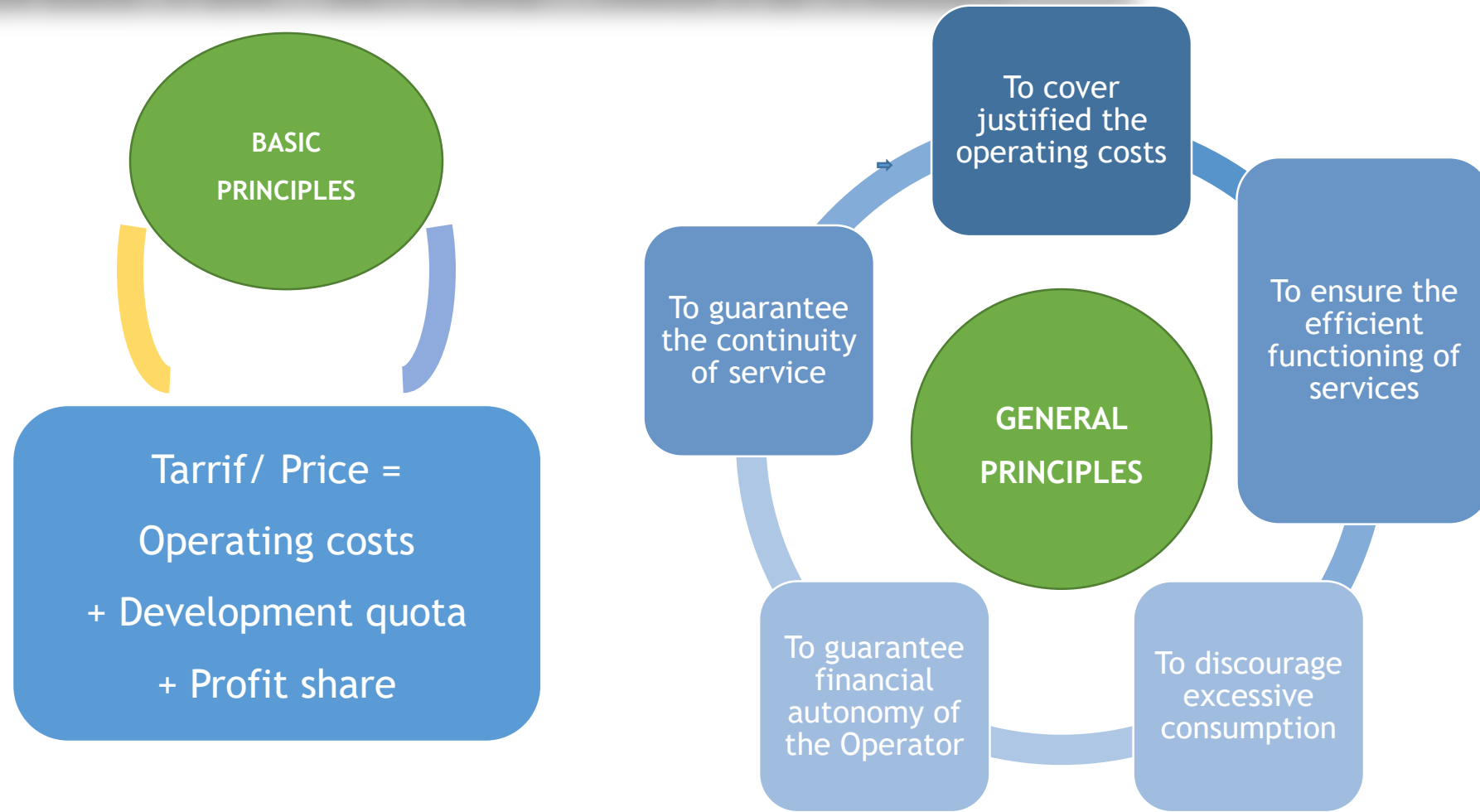
Romania water services organization

- ▶ Romanian water operators provides the whole cycle services

Water	Sewerage	Wastewater
Catchment and treatment	Collection	treatment
Transport and distribution	transportation	

- ▶ The infrastructure is public property
- ▶ All water companies are public (of the local authorities), except Bucharest and Ploiesti (Veolia)

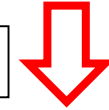
PRINCIPLES FOR SETTING TARIFFS/ PRICES



Tariff structure

I
N
V
E
S
T
M
E
N
T
S

ASSETS	COST ELEMENTS	ADJUSTMENT
	Operating expenses: Raw water, energy, fuel, staff	INFLATION
	Maintenance & repair expenses Executed by themselves/ third parties <ul style="list-style-type: none"> ▶ <i>emergency repairs</i> ▶ <i>routine maintenance</i> ▶ <i>preventive maintenance</i> 	REAL TERM
		FORMULA
	Environmental expenses:	FINANCING/ LOAN AGREEMENT
	Financial expenses: Interest and commission, exchange rate loss	
Water Co. Fixed assets: buildings, equipment etc.	Company' assets depreciation	
City Fixed assets: w& ww. networks etc. (Delegation contract)	Public assets depreciation: zero !	
	Royalty	
	Development fund	
	Profit	



A
F
F
O
R
D
A
B
I
L
I
T
Y



PRICING STRATEGY UNDER THE DELEGATION CONTRACT

THE FORMULA FOR ADJUSTING TARIFFS/PRICES

Prices of drinking water and the tariffs in the drains - sewage sludge shall be adjusted with the increases in real terms and with inflation rate according to the following formula:

$$P_{n+i} / T_{n+i} = P_n / T_n * (1 + a_{n+1}) * \dots * (1 + a_{n+i}) * I_{n+i}$$

THE FORMULA FOR ADJUSTING TARIFFS/PRICES

✓ I_{n+i} inflation related adjustments $n+i$,

$$I_{n+i} = \frac{CPI * (1 + INF)^{m/12}}{IPI}$$

where:

- ❑ CPI - the latest index of prices ;
- ❑ IPI - initial price index from the data price/tariff n ,
- ❑ INF - inflation for the 12 month period before the latest price index available;
- ❑ m - the number of the months between the date of the most recent price index available and effective date of the new price/ tariff.

TARIFF balance

Social costs

Economic Costs

Social/political cost

Affordability

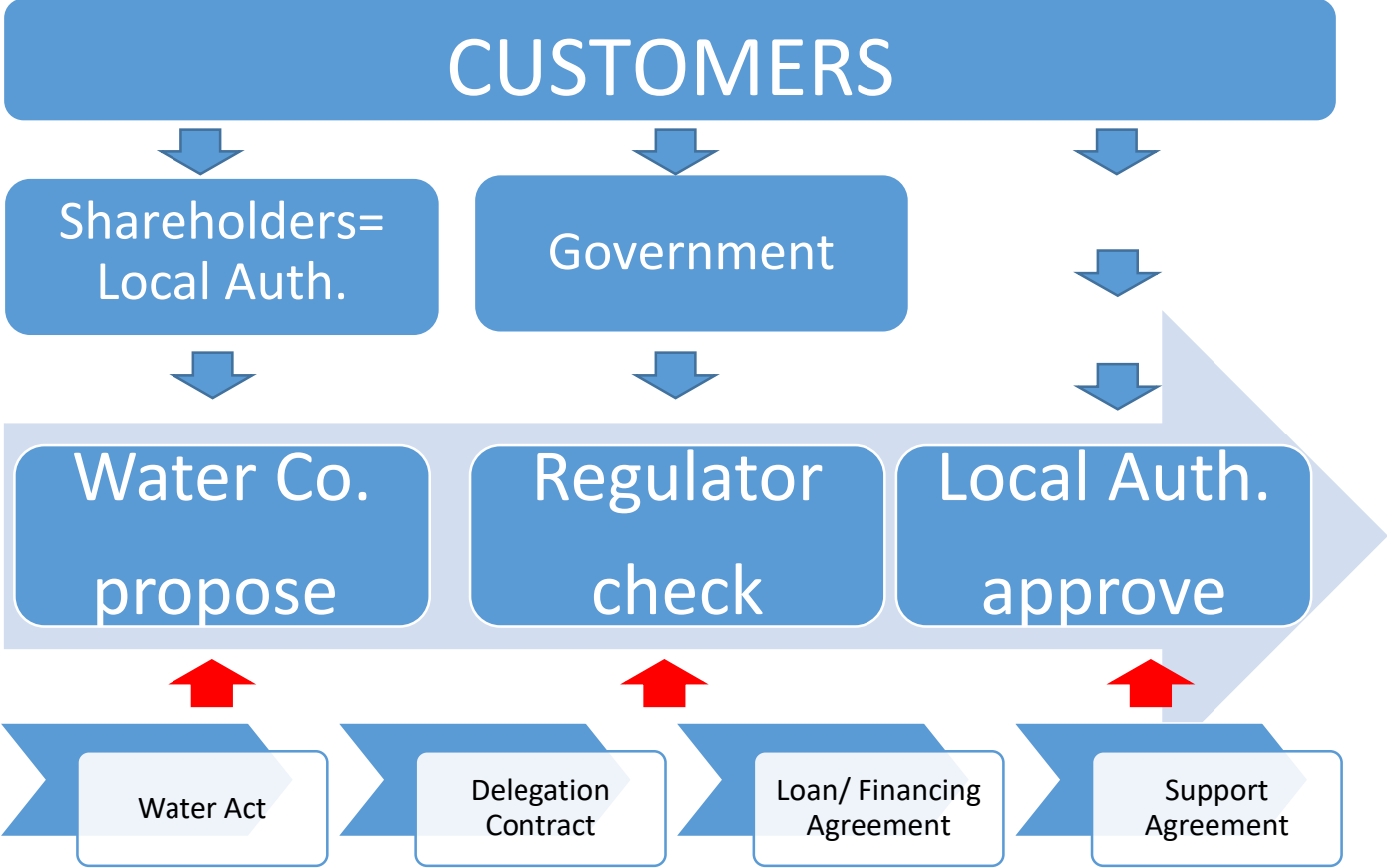
Inflation

Loans/
Investments

Cost elements



Tariff approval process



Tariff policy

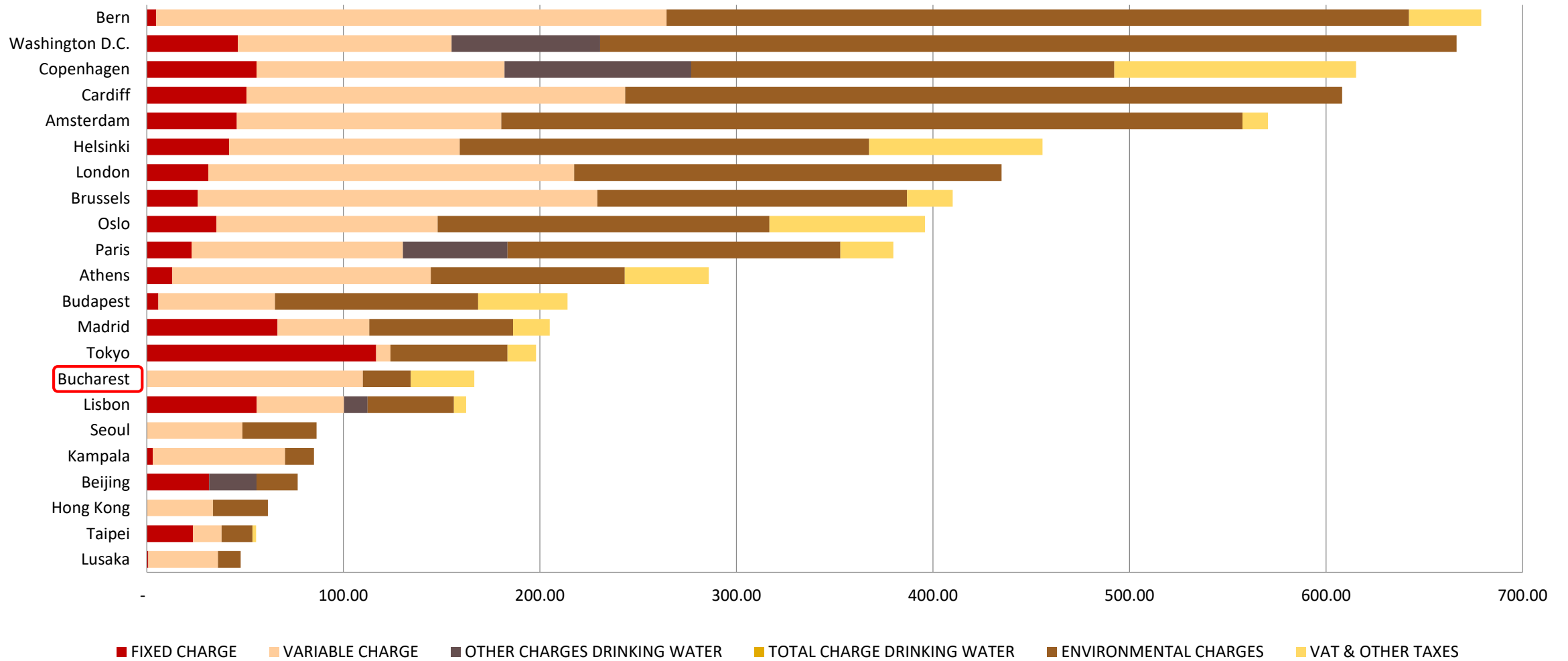
- ▶ Volume based/ Fixed part possible/ Polluters pay principle
- ▶ Strategies were related to the investment projects considering the affordability criteria:

2000: 4.0% for the average household income

2003-2004: 3.5%

2007-2011: 2.0-2.5% max. 4% for the lowest decile.

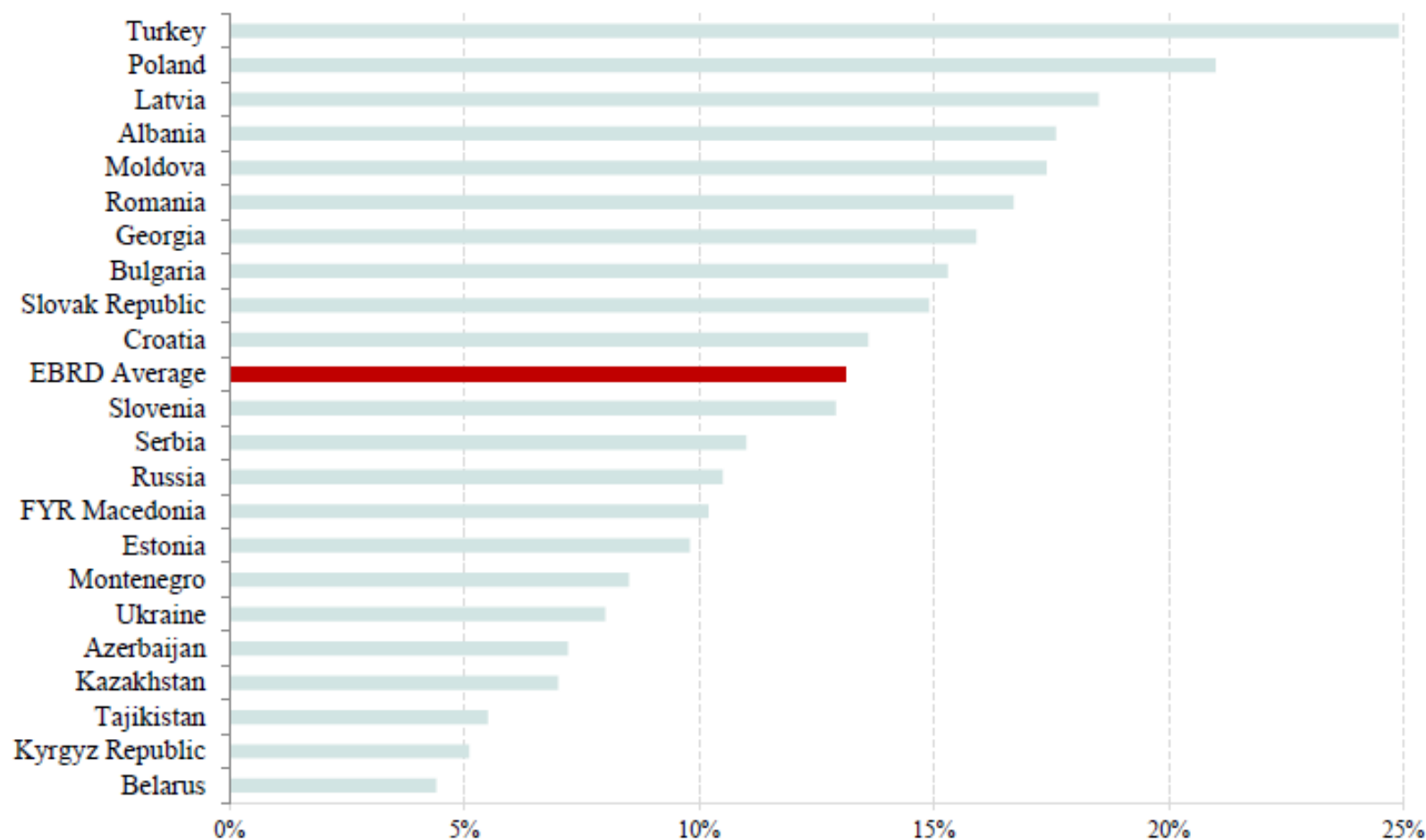
Total charges for capitals in 2015 for a consumption of 100 cm in US\$



Share of utility expenditures in total household expenditures



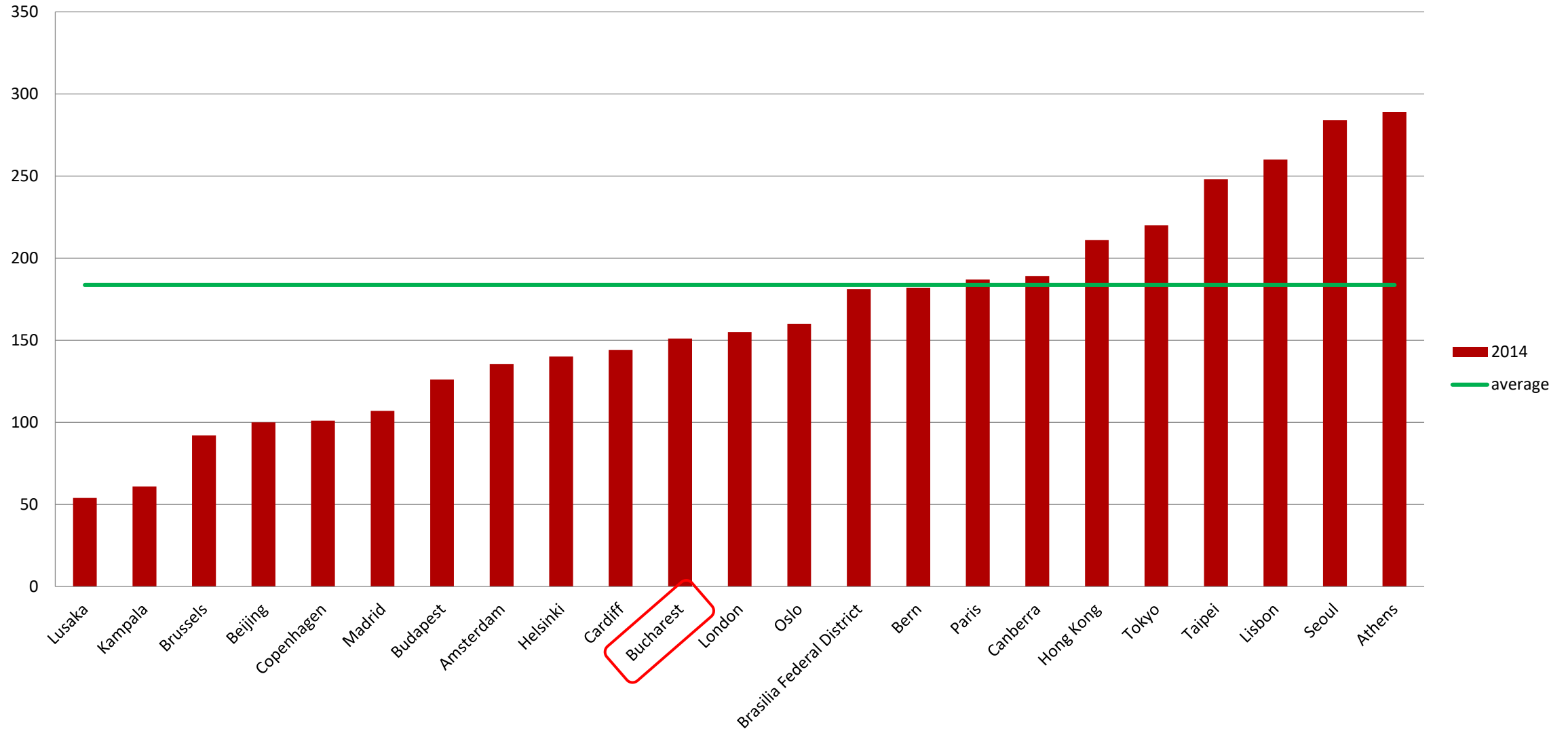
European Bank
for Reconstruction and Development



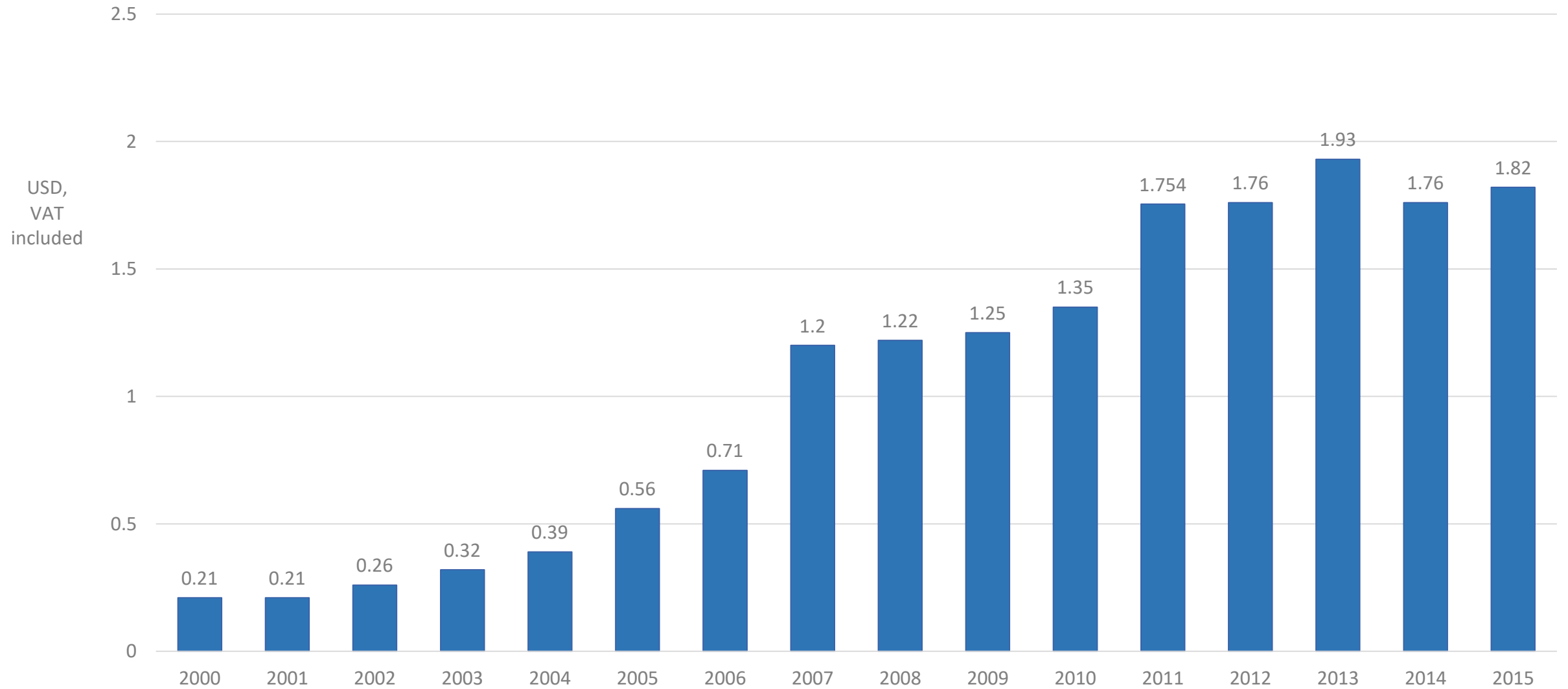
Source: Household Budget Surveys (2012-2013) of respective countries

Specific Water Consumption for Capitals in 2014

Liters/Capita/ Day

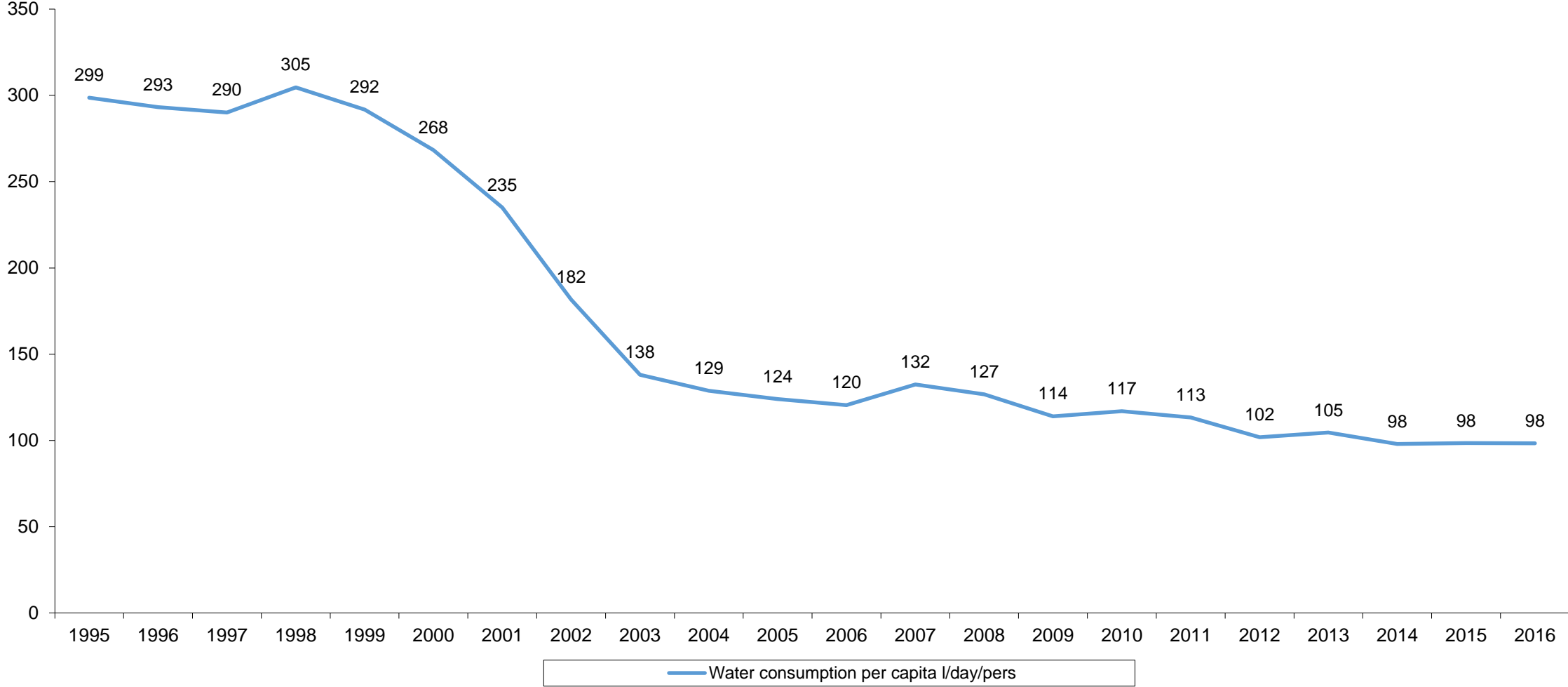


Water and sewerage tariff evolution 2000- 2015, Romania



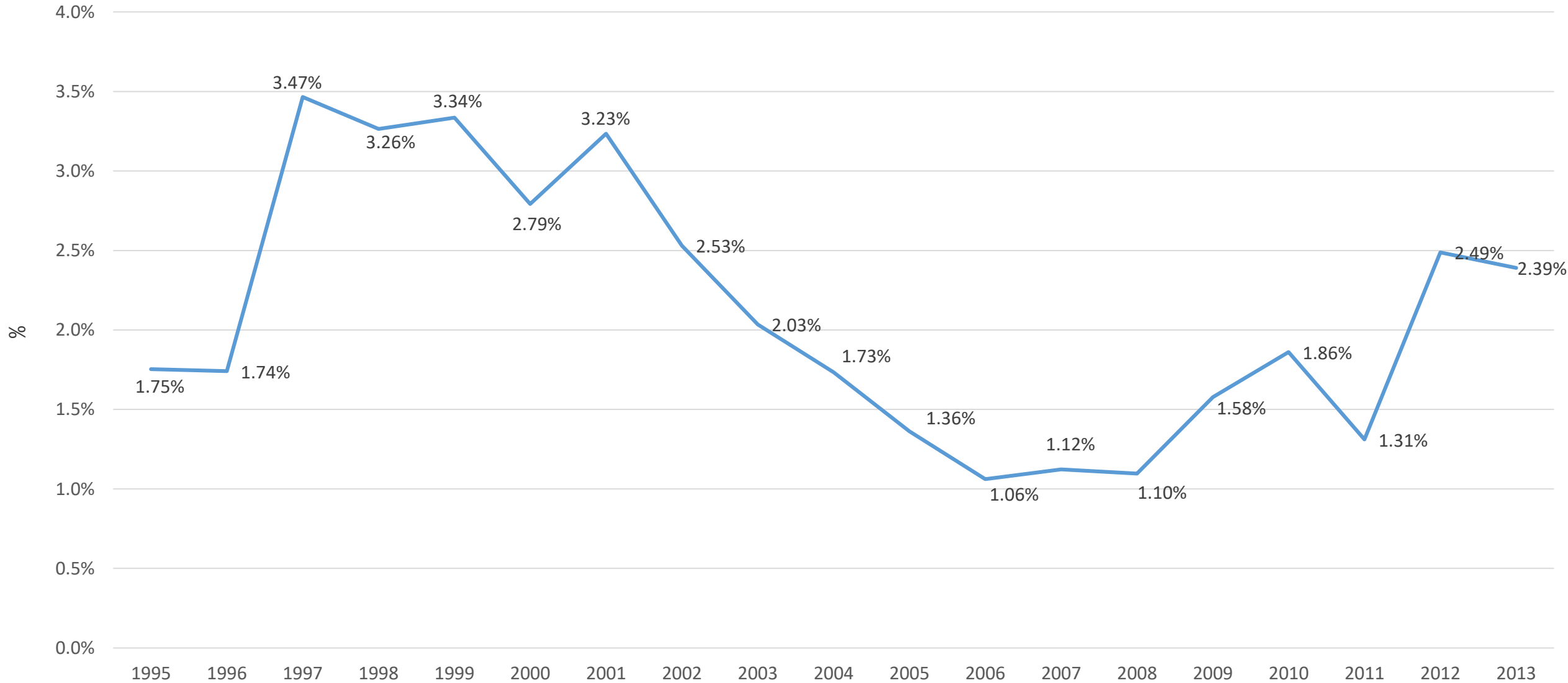
Water consumption per capita

Compania Apa Brasov, Romania

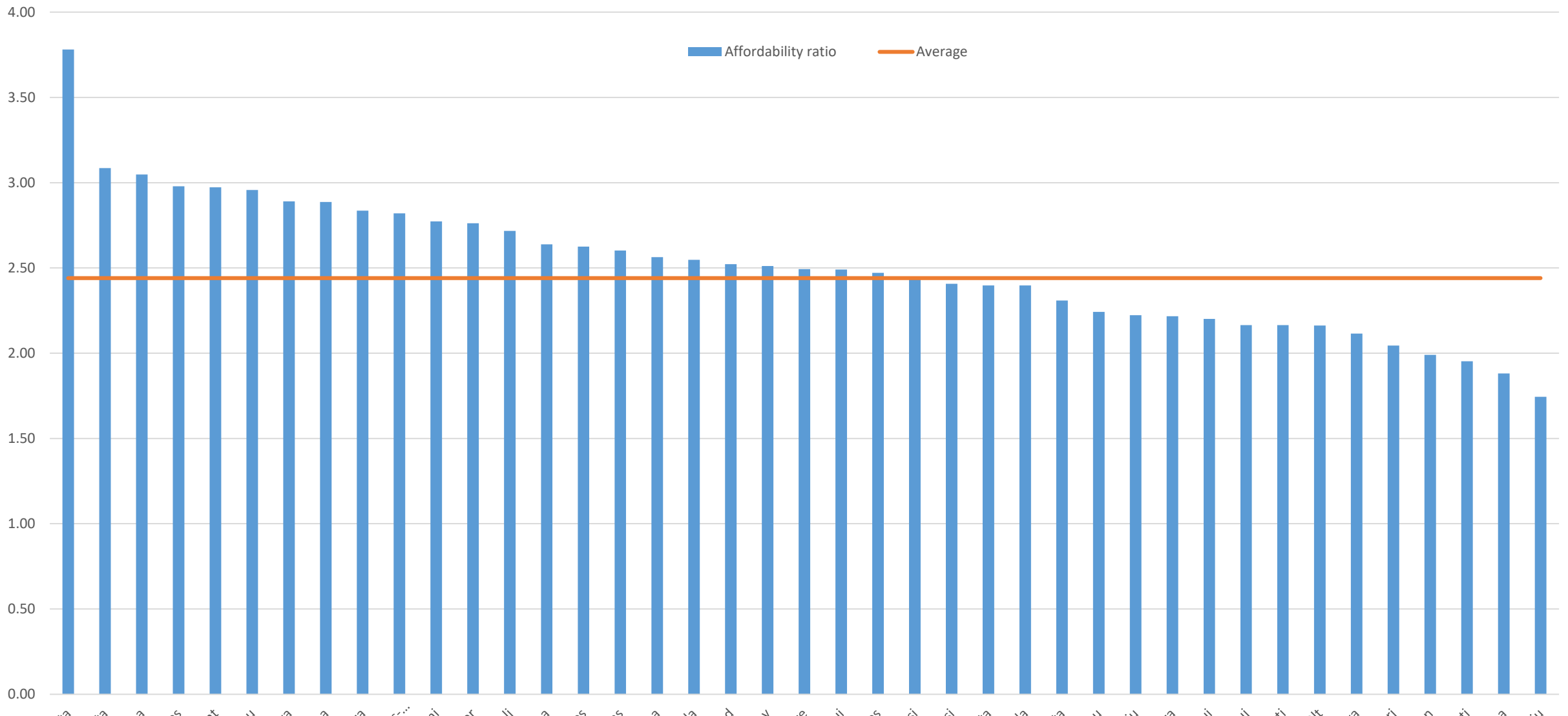


Affordability

Compania Apa Brasov



Affordability ratio in 2016 Benchmarking in Romania



Thank you!

Teodor Popa

dorupopa@apabrasov.ro

Compania Apa Brasov
13, Vlad Tepes street
500092 Brasov, Romania

