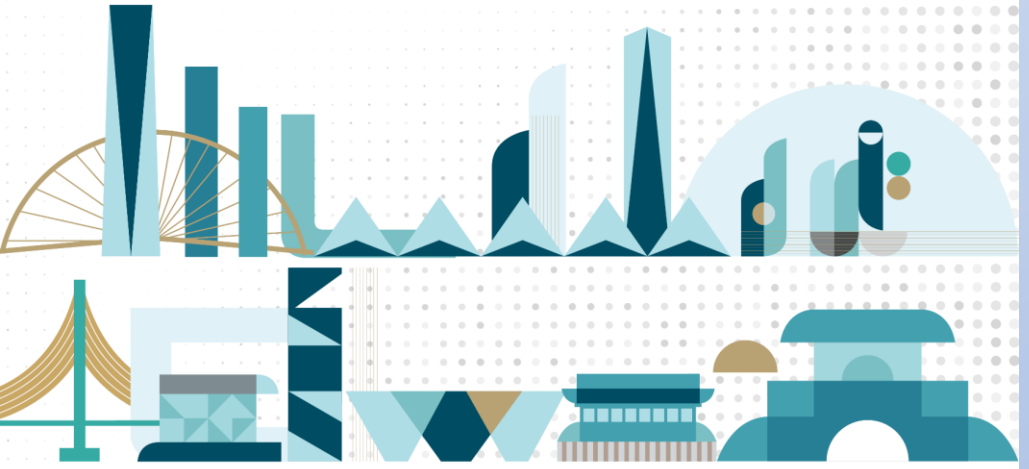
International
Disaster Resilience
Leaders Forum
Incheon 2022

2022 인천 국제재난복원력
지도자 포럼

2022.9.28.-29.
SONGDO CONVENSIA
GRAND BALLROOM A HALL
송도 컨벤시아 그랜드볼룸 A홀



주최 Incheon Metropolitan City UNDRR UN Office for Disaster Risk Reduction THE INCHEON INSTITUTE 후원 Ministry of the Interior and Safety

Campinas' Case of Resilience: IMPROVING WATER SECURITY

Manuelito Pereira Magalhães Jr.

CEO SANASA
Campinas' Water and Sewage Company

Campinas/ Sao Paulo/ Brazil

PREFEITURA DE CAMPINAS SANASA CAMPINAS

CAMPINAS

SAO PAULO - BRAZIL

COMPANY DATA

General

- 2,120 employees
- 4,429 km sewage pipes
- 4,771 km water pipes
- 4.5 m³/s water treatment capability
- R$ 1 billion anual revenue (U$ 200 million)

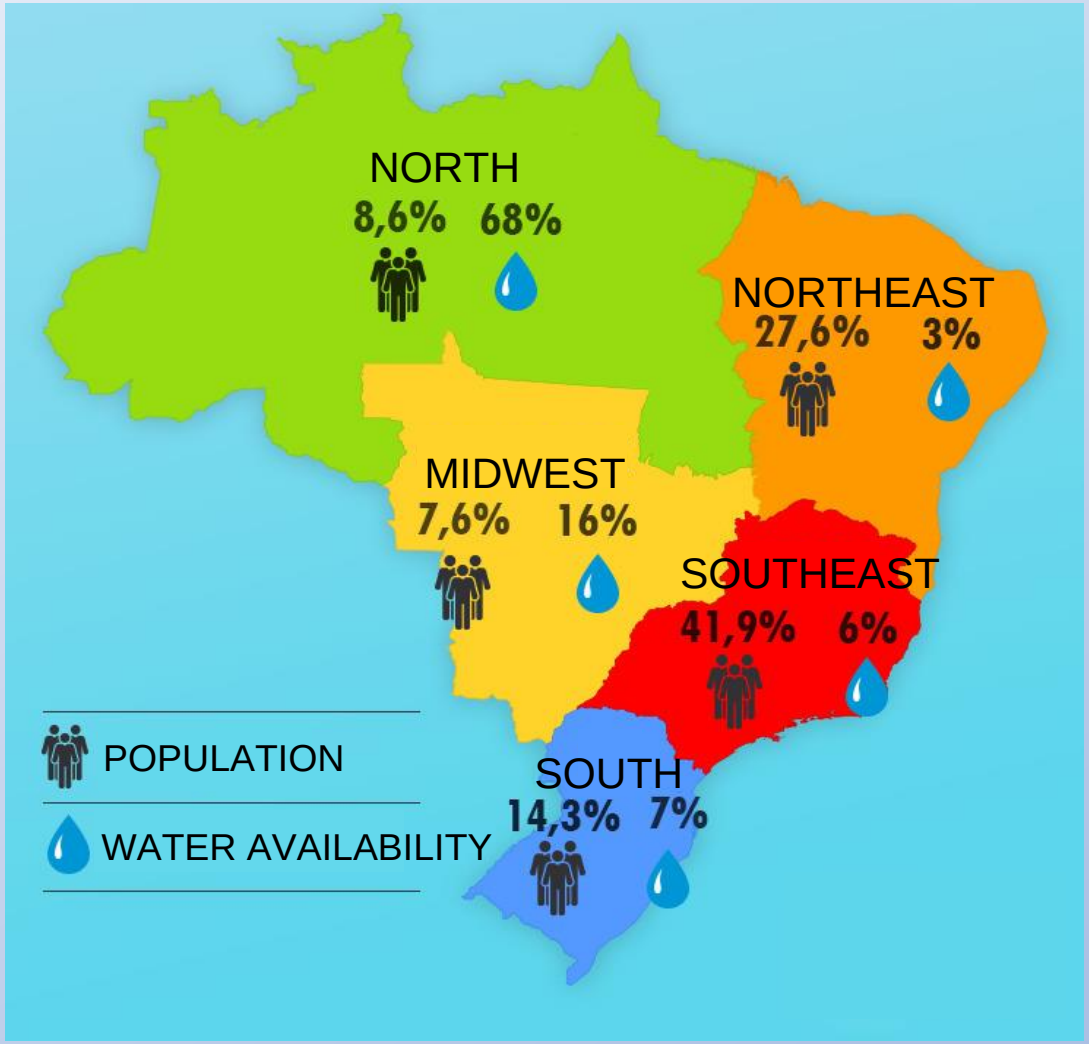
Indicators

Treated Water Supply	• 99% • 84%
Sewage Collect and Clearance	• 96% • 55%
Sewage Treatment	• 89% • 50%
Loss Index in Distribution	• 20% • 40%

* Source: SNIS 2021

WATER AVAILABILITY

Brazilian fresh water distribution



Most populated regions have less fresh water

WATER AVAILABILITY

UN Classification United Nations

> 2,500 m³/inhab.year - Self Sustainable

< 2,500 m³/inhab.year - Poor

< 1,500 m³/inhab.year - Critical

Brazil - 35,000 m³/inhab.year

São Paulo State - 2,468 m³/inhab.year

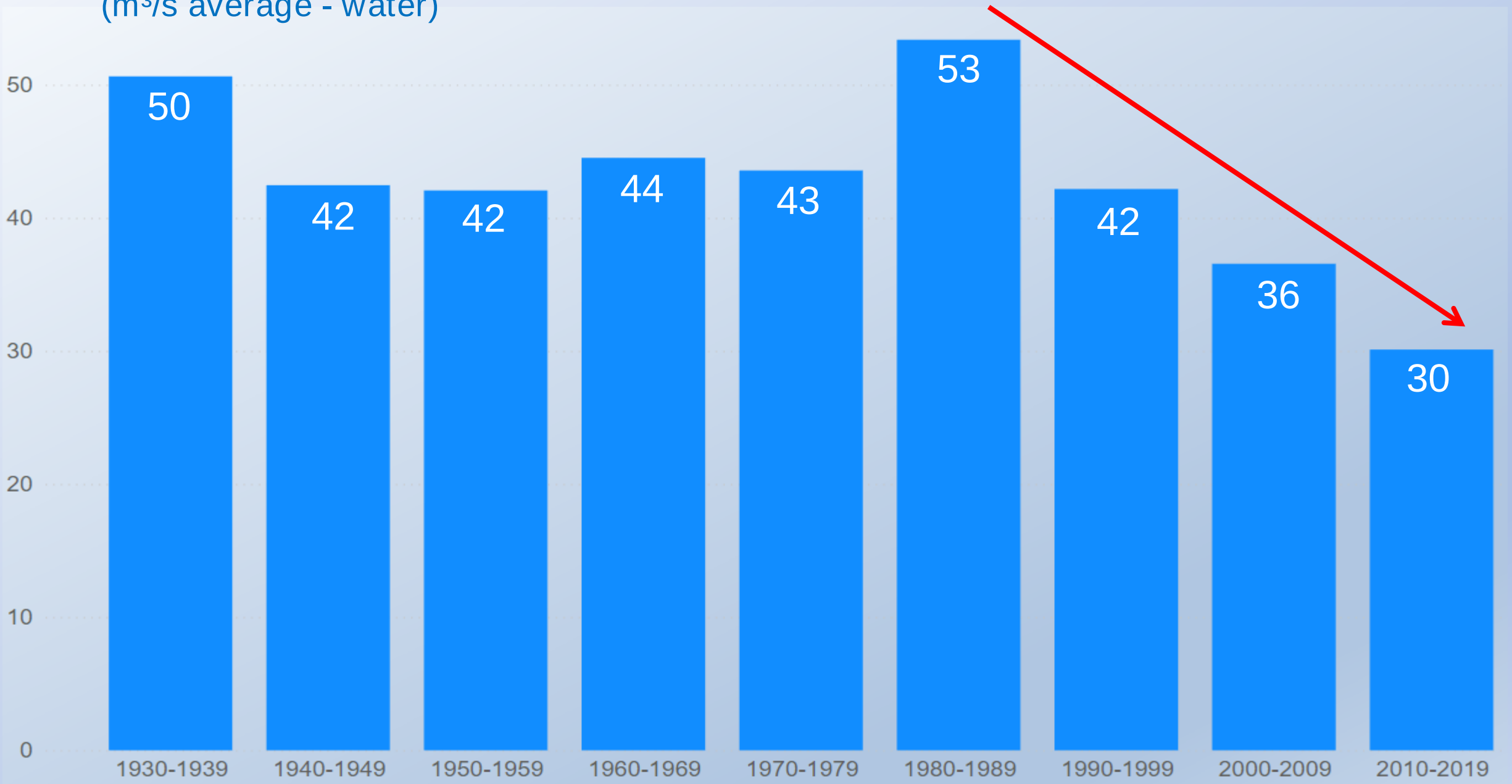
Cantareira System - 1,090 m³/inhab.year

PCJ Basin - 951 m³/inhab.year

2021

Cantareira System Water Inflow

(m³/s average - water)



CAMPINAS 2030 – Water Security Plan

The **City's** Great Challenge in the coming years

- Increase water security in Campinas
- Reduce Cantareira System dependance
- Enable basins interconnections
- Pursue new water sources
- Develop Reuse Water Market
- Water Loss Reduction

ure of Cantareira System's 2021 Drought

CAMPINAS 2030 - Challenges

Water Loss Program

1994 to 2020: 450 km

2021 to Jul/2022: 190 Km

2022 to 2024: +260 Km

Reservoirs

Until 2020	2021-2024
73 Reservoirs	92 Reservoirs
142 million liters	190 million liters

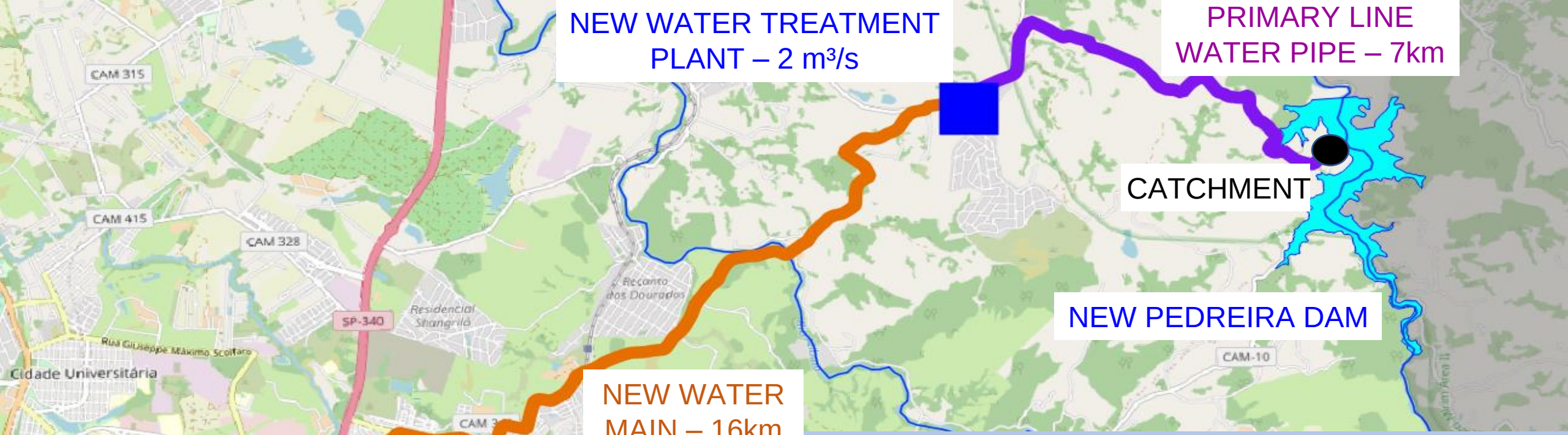
Reuse Water

2 RWPP* in operation
+1 RWPP* under construction
Total Capacity: 1.73 m³/s

Paulínia Petrochemical HUB
Viracopos Airport and Other Industries

*Reuse Water Production Plant

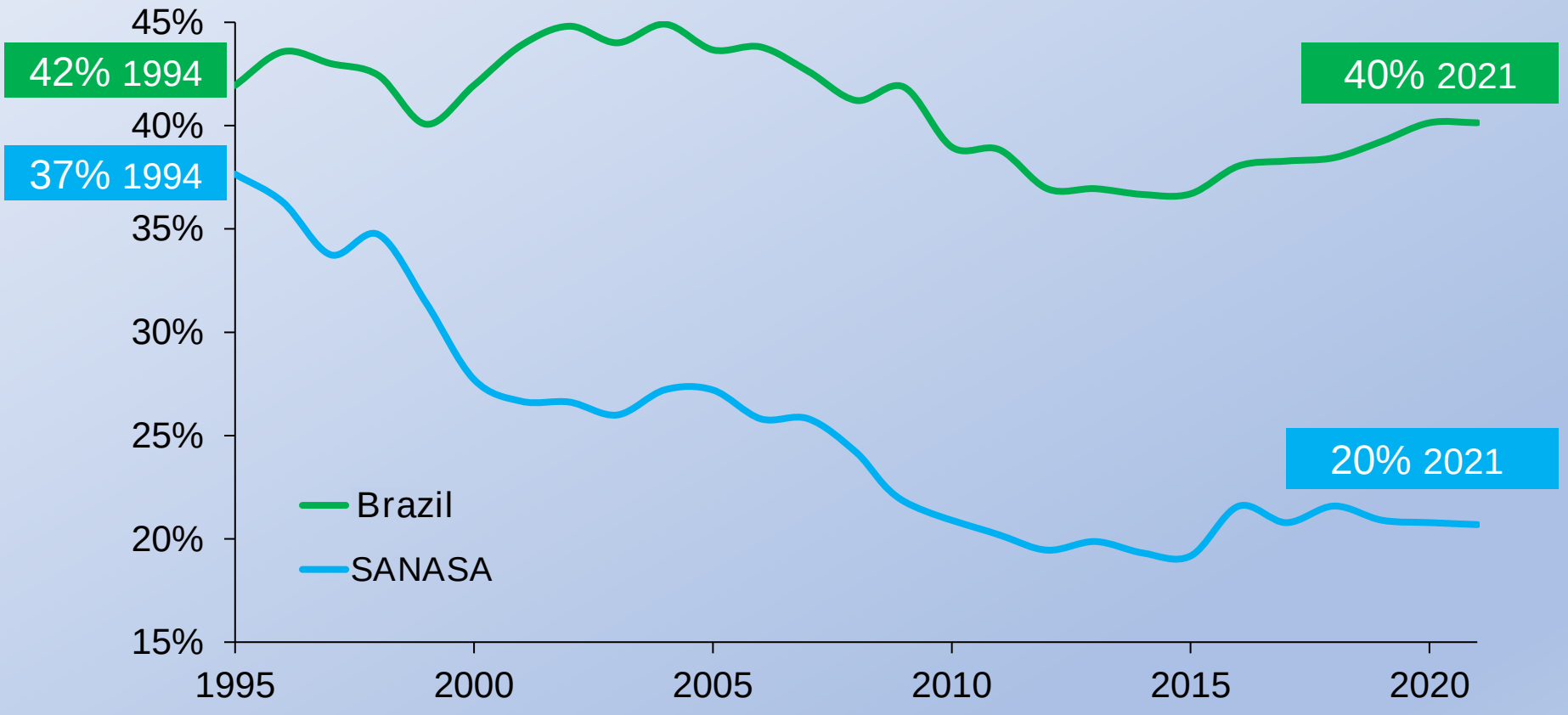
New Water Source



EXPECTED INVESTMENTS – NEW WATER SOURCE

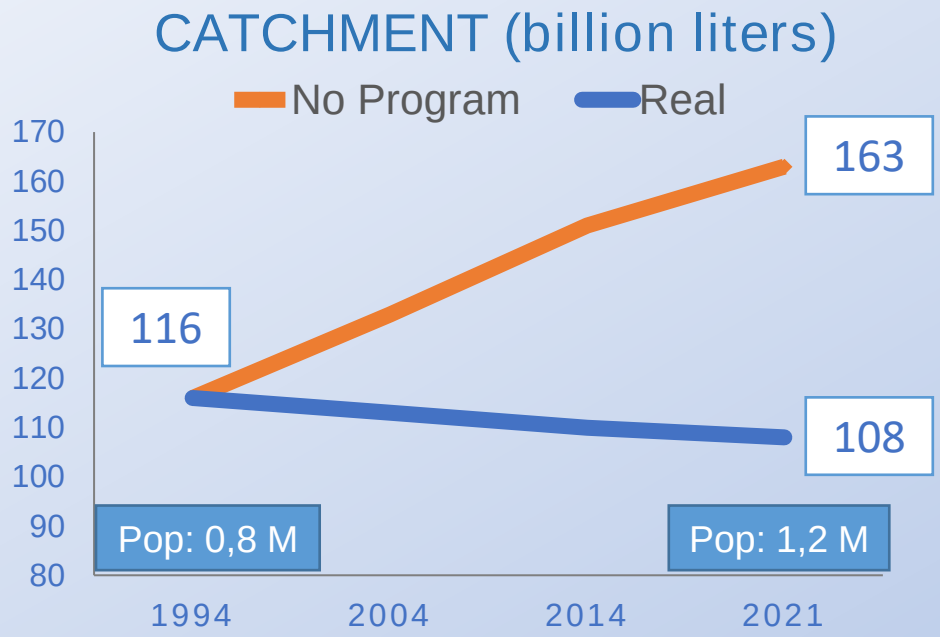
CATCHMENT	U$ 7.653.967,63
PRIMARY LINE WATER PIPE	U$ 14.656.533,75
NEW WATER TREATMENT PLANT	U$ 80.582.708,25
NEW WATER MAIN	U$ 31.364.982,23
NEW WATER MAIN NORTE III	U$ 11.843.663,64
	U$ 134.258.191,87

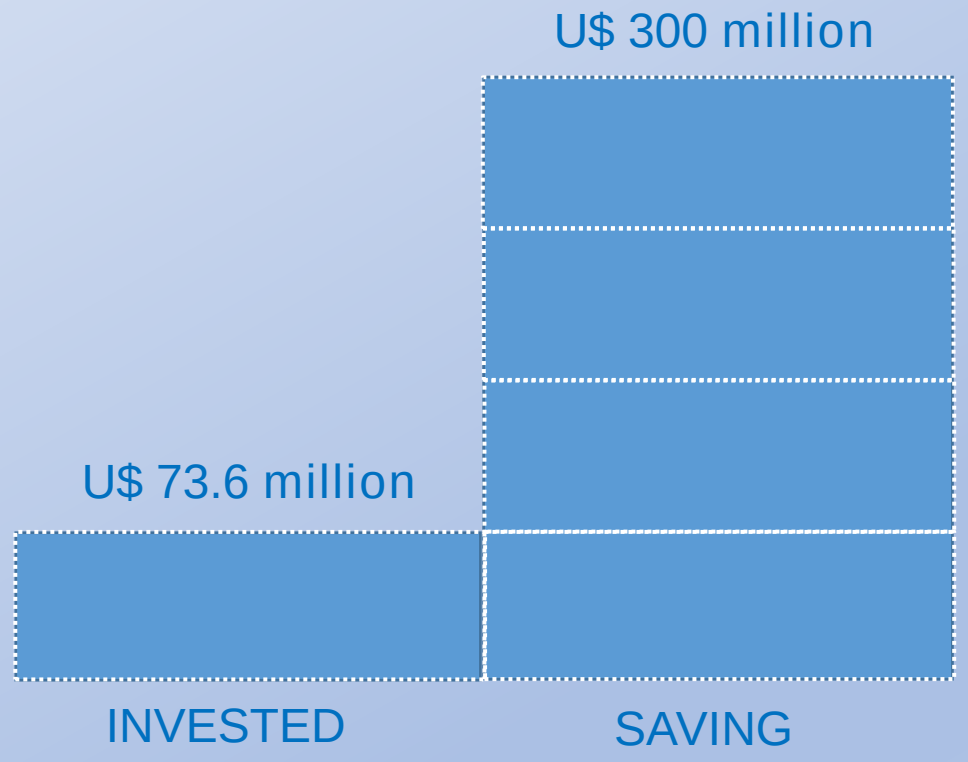
Water Distribution Loss Evolution Campinas and Brazil 1995-2021



Achieved Results

SANASA - Loss Reduction Program





ENVIROMENT

- 584 Billion liters withdrawl
- Water Treatment Chemicals
- Basin Vitality

ECONOMIC

For each $1 invested, $4 saved

Campinas: Resilience is our History

22 July 2013

UN Recognizes **Campinas'** lead to reduce disaster risk

Source: United Nations Office for Disaster Risk Reduction – Regional Office for the Americas and the Caribbean

22 February 2022

On behalf of Campinas, mayor receives the "Resilience **Hub**" Title in celebratory event

Source: Making Cities Resilient 2030 (MCR2030)

WORKING TODAY FOR TOMORROW'S RESILIENCE

MANUELITO PEREIRA MAGALHÃES Jr.

CEO - SANASA

presidencia@sanasa.com.br