Working together to face the challenges

15TH MAI 2017 BUCHAREST

inspiring change
CHALLENGE 1: WATER IS A HUMAN RIGHT
CHALLENGE 2: SDG’s
NOT JUST FOR DEVELOPING COUNTRIES

THE GLOBAL GOALS
For Sustainable Development

1. NO POVERTY
2. ZERO HUNGER
3. GOOD HEALTH AND WELL-BEING
4. QUALITY EDUCATION
5. GENDER EQUALITY
6. CLEAN WATER AND SANITATION
7. AFFORDABLE AND CLEAN ENERGY
8. DECENT WORK AND ECONOMIC GROWTH
9. INDUSTRY, INNOVATION AND INFRASTRUCTURE
10. REDUCED INEQUALITIES
11. SUSTAINABLE CITIES AND COMMUNITIES
12. RESPONSIBLE CONSUMPTION AND PRODUCTION
13. CLIMATE ACTION
14. LIFE BELOW WATER
15. LIFE ON LAND
16. PEACE, JUSTICE AND STRONG INSTITUTIONS
17. PARTNERSHIPS FOR THE GOALS
An abandoned ship in the former Aral Sea, near Aral, Kazakhstan
• Climate change impact: what we know
• Climate change: what we do not know so well
Inspiring changes
The “Principles for Water Wise Cities” Framework: four Levels of Action and five Building Blocks for urban stakeholders to deliver “Sustainable Urban Water” in their cities.
Mitigation of climate change: we have a role to play … but

Germany Energy Consumption : 7500 Kwh/p/y
(Koweit: 15000, Portugal 4700)

Water production: 30 Kwh for 70 m3/y
Water distribution: 35 Kwh for 70 m3/y
W. Water treatment: 30 Kwh for 70 m3/y

Energy for home hot water : 600 Kwh/y for 18 m3/y
NUMBER OF DISASTER PER CONTINENT

EM-DAT: The OFDA/CRED International Disaster Database - www.emdat.be - Universite Catholique de Louvain, Brussels - Belgium
DEATH (1000) PER TYPE: ANTICIPATION AND ADAPTATION IS KEY
• COP 22: first time adaptation is well presented

• a need for mobilisation on water issues!
• Resilient cities to extreme events
RESILIENCE IS PREDICTIVE ANALYSIS AND ANTICIPATION

Assessment of the situation

**UNDERSTAND**
the local context & the working of your wastewater system

Predictive tools & alert systems

**ANTICIPATE, MEASURE, ALERT**

Optimization of existing facilities

**IMPROVE**
the efficiency of your current infrastructures

Planning

**DEFINE**
together an action plan meeting your objectives

New installations

**DESIGN, BUILD, OPERATE**
new suitable stormwater infrastructures
LACK OF RENEWABLE RESOURCES (M³/CAP/D)
SAVING WATER IS A NECESSITY TO-DAY

*Source: Global Water Intelligence
SAVING WATER (OR RENEWING WATER): A LOT OF ACTIONS ARE POSSIBLE

Cost euro / m³ saved or replaced

Marginal production cost
Marginal cost for consumer

Collective Solutions
Individual Solutions

Desalination
Re Use
Conventional resources
Renew 1%/year dist. network
Leak detection
Separate irrigation tariff
Individual metering
Individual Well
Small scale rainfall storage
Rainfall collection 10 m³
Mitigeur thermostatique
Washing machine
Efficient tap
Pressure reduction on
Flush
2 speed Toilet
EX: LEAK DETECTION & ASSET MANAGEMENT

- Cost euro / m³ saved or replaced
- Renew 1% / Year dist. network
- Leak detection
- Pressure reduction on tap
- Efficient washing machine
- Mitigeur thermostate
- Rainfall collection 10 m³
- Small scale rainfall storage
- Individual Well 100 m³
- Separate irrigation tariff
- Individual metering
- Rainfall collection
- Leak detection
- Renew 1% / Year dist. network

Collective Solutions
Individual Solutions
Marginal production cost
Marginal cost for consumer

Cost euro / m³ saved or replaced
10 9 8 7 6 5 4 3 2 1 0
2 speed Toilet
Flush
Pressure reduction on tap
Conventional resources
Re Use
Desalination
CREATING NEW RESOURCES

Cost Euro / m³ saved or replaced

Individual Solutions

Collective Solutions

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Marginal production cost
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Cost Euro / m³ saved or replaced
MAJOR CHALLENGES FOR SUSTAINABLE GROWTH OF WATER REUSE

- New policy: Converge regulatory frameworks, provide institutional incentives and reform water rights
- Public Perception: Improve communication and public education
- Innovative technology: Improve efficiency, reliability and water quality
- Economic viability: Establish appropriate water pricing, provide adequate financing and subsidies
- Frame best management practice
Working together on soft knowledge
STAKEHOLDERS AND INSTITUTIONAL DRIVERS
Carta de Lisboa

Orientando as Políticas Públicas e Regulação do Abastecimento de Água Potável, Saneamento e Serviços de Gestão de Águas Residuais

European Water Regulators

“Knowledge and Regulation for Quality Services”