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# Presentation of AQUAWAL, the Union of Public Water Cycle Operators

# Water sector in wallonia

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ESTONIAN WATER WORKS ASSOCIATION SINCE 1995

ESTONIAN WATER WORKS
ASSOCIATION EVEL
STUDY TOUR IN WALLONIA (BELGIUM)
26th October 2015 - Namur

# Plan

- The Walloon water sector
  - Water policy in the Belgian federal structure
  - Drinking water sector
  - Wastewater sector
  - Aquawal (Water federation)
  - Main challenges
- Nitrawal
- Water pricing in Wallonia: the true or "truth" cost principle
  - Tariff structure
  - Truth-cost for distribution
  - Truth-cost for waste water treatment
  - Water social fund

# Water policy in Belgium

*European directives*

(11 .$10^6$ inhabitants)

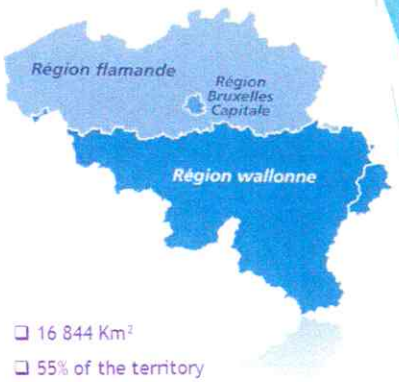
**Water policy transferred to Regions in 1988**

Brussels Region

Flemish Region

Walloon Region

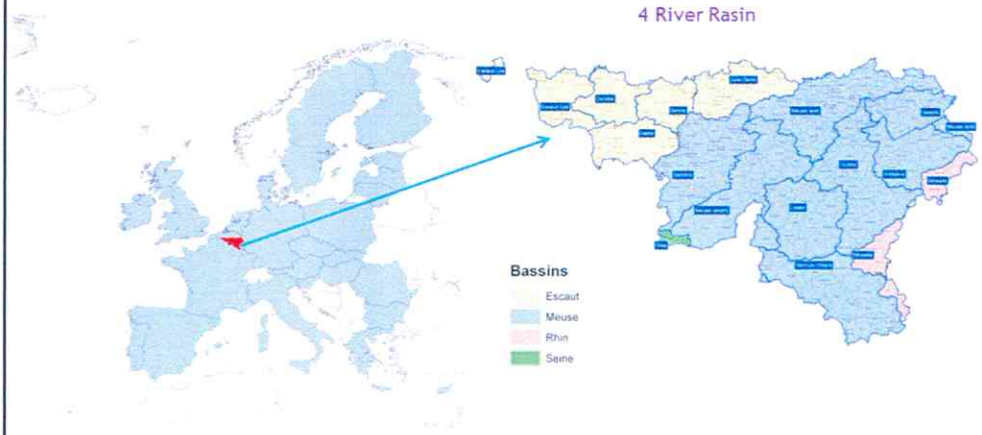
**Exceptions: technical norms, North Sea, relations with EC**




- 16 844 $Km^2$
- 55% of the territory
- 262 municipalities
- 3,6 M inhabitants - 205 inh./$km^2$, 32% of the population
- Average income per household : 41 065 € (2013)

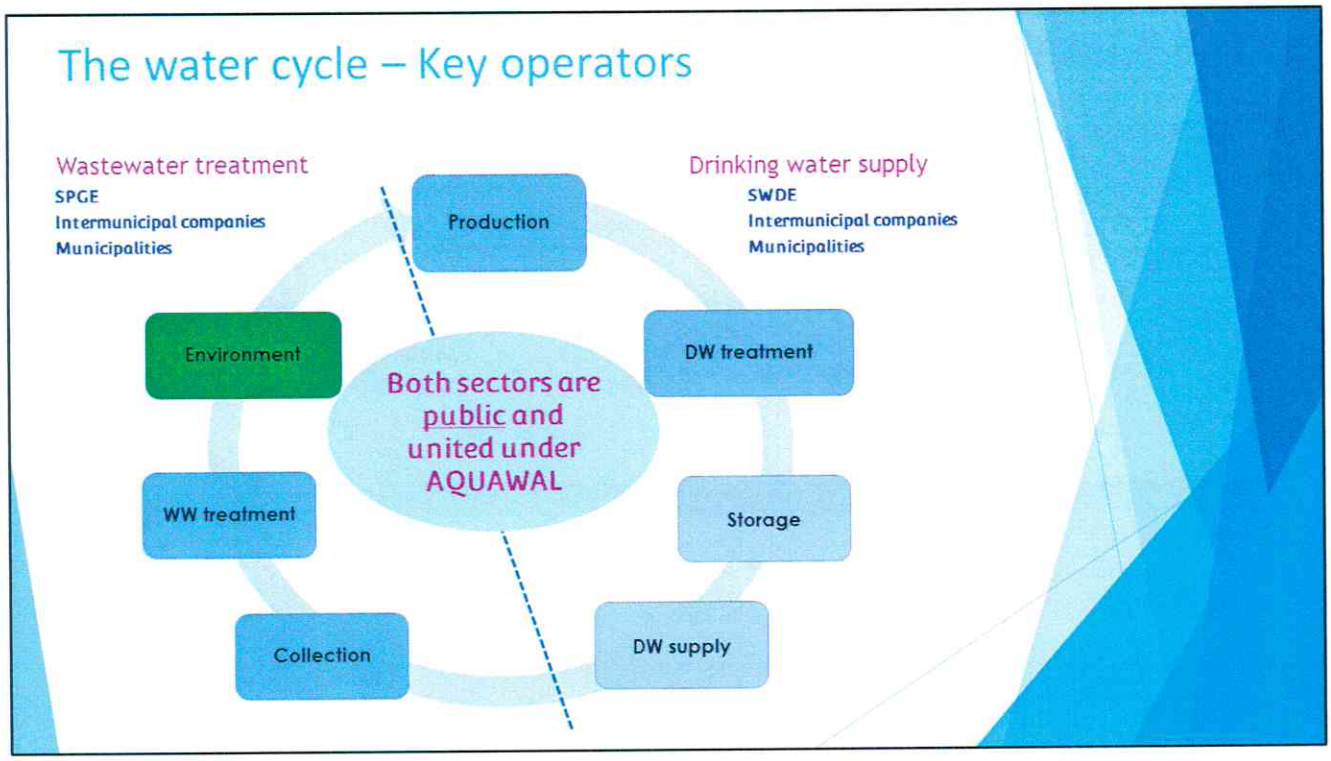
# Water resource management

4 River Rasin

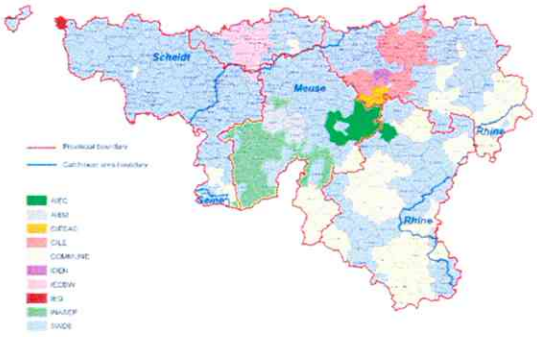



*« Water is part of the common patrimony of the Walloon region »*
*(Walloon water code, article D1, §1)*

# The water cycle – Key operators



# The drinking water sector




80% groundwater
310 millions m³

20% surface water
70 millions m³

380 millions m³

40% exported to Brussels and Flanders
150 millions m³

40% Water consumption in Wallonia
160 millions m³

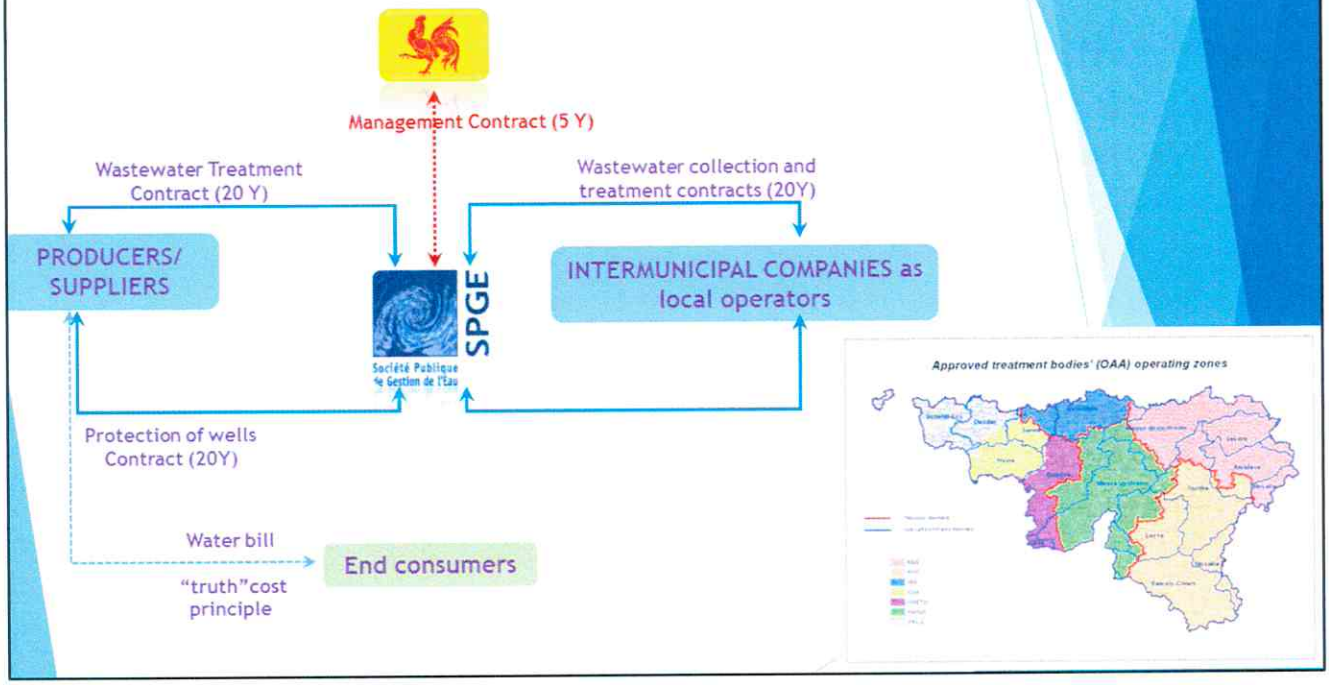
20% unregistered
70 millions m³

| Management type | Number of operators | % pop supplied |
|---|---|---|
| Regional company (SWDE) | 1 | 67% |
| Intermunicipal companies (CILE, .... ) | 9 | 27% |
| Municipalities | 40 | 6% |

- 4 main operators covering 90% of needs
- 120 L/day/inhabitant (*90 for domestic uses*)
- 2.450 FTE

- Number of connections : 1.500.000
- Length of network (km) : 40.000 Km
- Length of connections : 18.000 Km

# The wastewater operators ....



# The wastewater sector in some figures ....

Operates and manages existing physical assets

- 3,1 millions IE connected to a WWTP (90% of the population)
- 420 Wastewater Treatment Plants
- Length of collectors : 2.300 Km - Length of sewer network : 17.300 Km

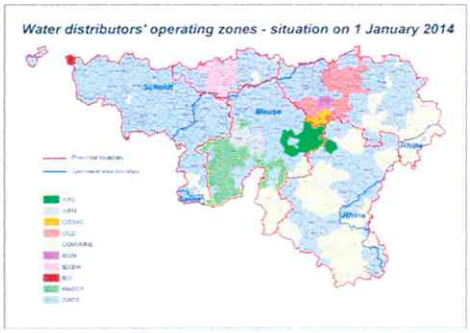
Has invested more than **€ 3 billion** in 15 years to comply with UWWTD (57 €/inh.year)

- Equipment rate doubled over the past decade
- 172 WWTP (built since 2000) + Length of collectors (1.000 km) + sewer network (since 2004 - 600 km)
- Number of employees : 857 FTE

# Evolution of equipment rate

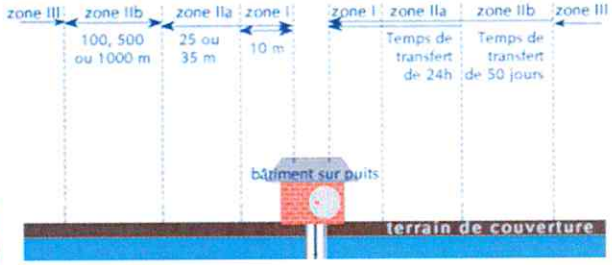
# Water Federation in Wallonia (AQUAWAL)

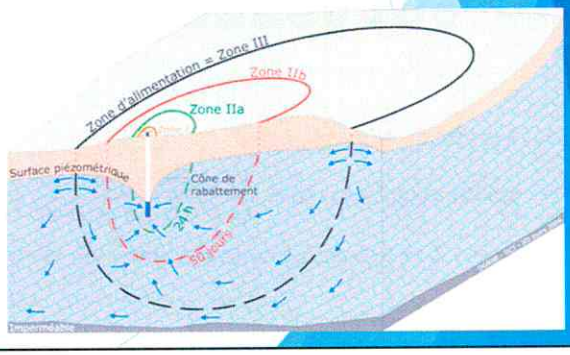
- SA AQUAWAL = Regional association of WWS operators
- AQUAWAL gathers 95% of the drinking water sector and the whole wastewater sector (7 OAA + SPGE)
- Permanent staff: 5 people
- Main objectives : lobby at regional level, sector communication, exchange of knowledge, etc.
- Representatives at Belgian level (BELGAQUA) and European level (EurEau, AquaPublica Europea)
- Representatives in International river commissions (Schelde, Meuse), in economical and environmental advisory committees, etc.




# Water resource protection

- **Protection of catchment areas (2009)**
  - Some activities or installations are prohibited
  - 4 protection areas
    - Zone I = Water intake area
    - Zone IIa = Close prevention area
    - Zone IIb = Remote prevention area
    - Zone III = Surveillance zone

# Programme for Sustainable Use of Nitrogen

- **Since 2001, follow-up the 91/676 Directive**
- **Measures applicable throughout Wallonia**
  - Spreading periods and conditions



  - Specific manure storages
  - Soil Binding rate: $SB = \frac{\text{kg org N produced}}{\text{kg org N spreadable}} \leq 1$
  - If SB > 1 → Spreading contracts between farmers

# Programme for Sustainable Use of Nitrogen

- **Additional measures applicable in the Nitrogen Vulnerable Zone**

  = 57% of the agricultural area in Wallonia

  = catchment areas where ground water nitrate concentrations exceed 50 mg/l

- Spreading limits
  - Limit per farm of 170 kg organic nitrogen applied per ha on average
- Limited spreading on crops on a slope
- Compulsory soil cover
  - Nitrogen-fixing crops on 90% of areas harvested before 1st September and followed by a spring crop
- Potentially Leachable Nitrogen (PLN)
  - $NO_3^-$ remaining in the soil before winter (leaching period) assayed on 5% of the farms in the NVZ and compared with variable reference standards

# Programme for Sustainable Use of Nitrogen

- **Nitrawal**
  - Public funding
  - 5 partners


Scientists
- Scientific validation of the programme
- Scientific support for Nitrawal actions

Union of Public Water Operators

Farmers union

Communication campaigns to:
- water users
- farmers

Free extension services for farmers:
- Helping farmers to adopt practices that protect water resources from pollution by nitrates
- Providing personalised technical advice and administrative supervision

# Survey Nitrate in Wallonia

# Walloon Pesticides Reduction Program

- **Since 2014, follow-up the 2009/128 Directive**
- **Main rules**
  - Interdiction of use of chemically treatments on impermeable surfaces connected to the rainwater collection system or directly to surface water
  - Buffer zones (along surface water or gathering systems): widths depending on the situation
  - « Phytolicence »: specific measures for professional users
  - 0 emission for municipalities (public areas) by 2019

# Agr'Eau

- Application for smartphones and tablets

www.agreau.be

  - Gathers the various agricultural laws that concern water on one platform


  - 15 partners

# WATER PRICING IN WALLONIA

Context: Water Framework Directive (2000/60/CE)

**Water pricing : Application of "TRUTH COST"**

"Truth cost" of water aims at including all services costs in water price = *full-cost recovery pricing*

**TRUTH COST FOR DISTRIBUTION (CVD)**
[established by suppliers]
[based on standard water accounting plan]

- ❑ Production (Producers)
- ❑ Distribution (Distributors)

**TRUTH COST FOR WASTE WATER TREATMENT (CVA)**
[established by SPGE]
[based on financial plan]

- ❑ Sewage (SPGE, Interco's)
- ❑ Waste water treatment (SPGE, Interco's)
- ❑ Protection of wells (SPGE, Producers, Protectis)

# WATER TARIFF STRUCTURE

## General principle

- ❑ Single tariff structure for all water companies
- ❑ Water bill is proportional to consumption
- ❑ Full cost recovery of water supply, protection of wells and waste water services
- ❑ One invoice per meter
- ❑ Applies to households, industries and farmers as well

| | |
|---|---|
| Fixed part | 20 CVD + 30 CVA |
| Variable component (blocks) | |
| From 0 to 30 $m^3$ | ½ CVD |
| From 30 to 5 000 $m^3$ | CVD + CVA |
| From 5 000 to 25 000 $m^3$ | 0.9 CVD + CVA |
| > 25 000 $m^3$ | a CVD + CVA with $0.5 \leq a \leq 0.9$ |
| Water social fund | 0.0250 €/$m^3$ |
| VAT | 6 % |

# TRUTH COST FOR DISTRIBUTION (CVD)

General principle

❑ Truth cost for distribution is the price to apply per cubic meter in order to **recover all charges (capital, operating, financial) devoted to production and distribution of water** – full-cost recovery pricing

❑ Calculation of CVD:

- Based on the **water accounting plan** and on a **financial plan**
- 1 CVD per supplier
- **Water control Committee** gives an advice on each increasing of CVD
- The price is approved by **the Minister of Economy**

Some examples of CVD (2015)

| | |
|---|---|
| SWDE | 2,6200 € / $m^3$ |
| CILE | 2,8086 € / $m^3$ |
| IECBW | 2,1600 € / $m^3$ |

→ Water control Committee gives an advice on each increasing of CVD

→ Minister of Economy approves the price to be applied

# TRUTH COST FOR WWT (CVA)

General principles

❑ Truth cost for sewage and WWT is a water fee (per cubic meter), the level of which is determined in order **to cover all costs (capital, operating, financial) generated by SPGE operations** (sewer, collectors and WWTP).

❑ Calculation of CVA:

- CVA is **determined by SPGE** and **approved by Walloon Government**
- Based on **SPGE's long-term financial plan** (up to 2025).
- **CVA is identical for all water consumers** (so for all the territory).

Some examples of CVA (2015)

| | |
|---|---|
| 2010 | 1,3080 €/m³ |
| 2011 | 1,4070 €/m³ |
| 2012 | 1,4750 €/m³ |
| 2015 | 1,9350 €/m³ |

→ Water control Committee gives an advice on each increasing of CVA

→ Walloon government approves the price to be applied

# WATER SOCIAL FUND

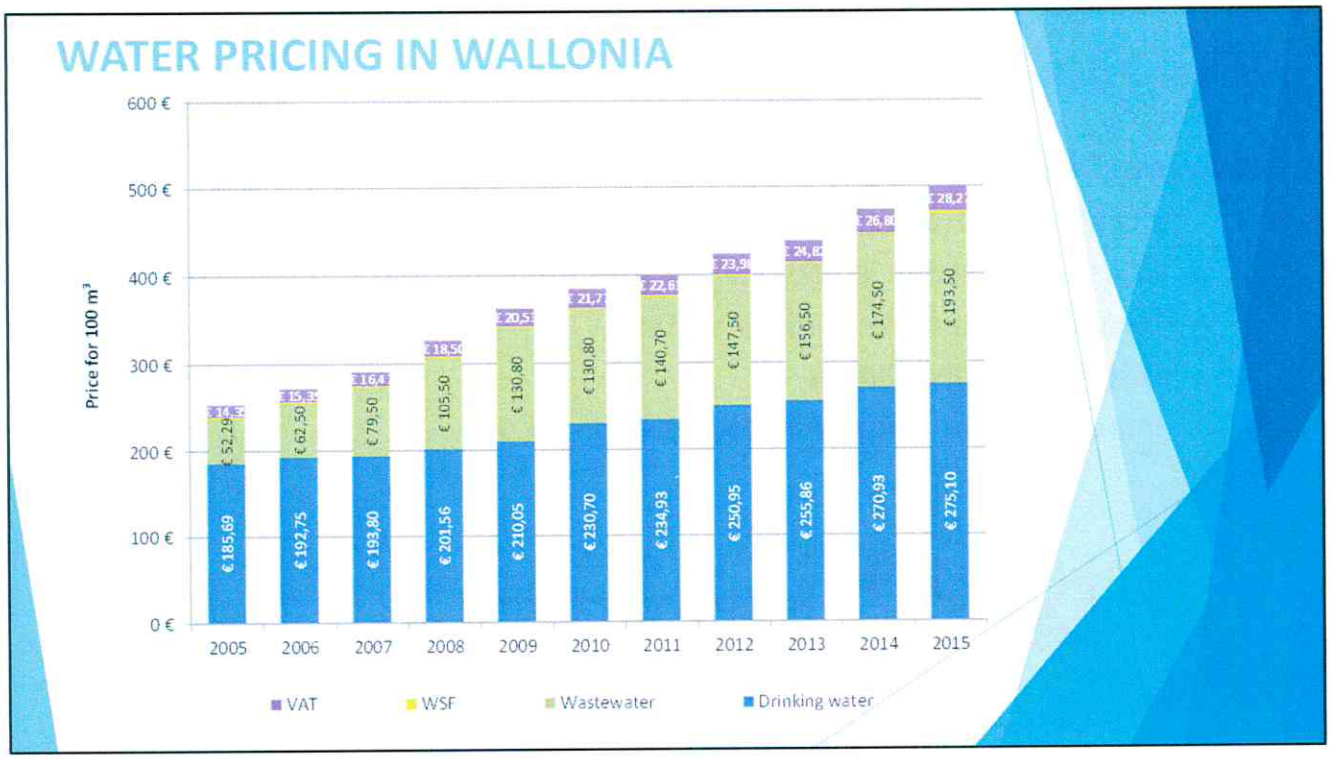
General principles :

- WSF is a **fee of 0,0250 €/m³** paid on each cubic meter
- It represents an amount of **4*10⁶ €/year**
- This amount of money is used to **help some households to pay the water bill**
- The **public centers for social help** determine which households may be eligible to the fund

Outlook

- number of households in difficulties is expected to increase due to the increase in the price of water
- the WSF contribution has been raised since 1st January 2015

# WATER PRICING IN WALLONIA



## Water Price increase: why?

**Stress on the price of water : main factors**

- Decline of water consumption per meter
- Investment needs in wastewater treatment
- Investment need in drinking water
- Dispersal of population
- Increase of the debt recovery procedures


**is still on track ...**

# Main challenges for the water sector

- **DRINKING WATER**

Ensuring huge and regular financings in order to provide an optimal service to the collectivity…

- Renewal of the network (1% per year to reach)
- Securing the water supply (rationalization of the management of water resources)
- Recovery of unpaid bills and affordability
- Control of water price (truth-cost)

- **WASTEWATER**

Keeping on investing in wastewater infrastructures in order to comply with EU directives, protect the environment while keeping the price at the lowest level

- Compliance with existing directives (UWWTD, WFD, BWD, Marine Strategy, Inspire, etc.)
- Sewer management (maintenance, renewal of assets, rainwater and urban runoff, CSOs)
- "New" pollutants and control at source (priority substances, microplastics, pharms, wet wipes, etc.)
- Better management of IAS (individual autonomous systems) in rural areas
- Better application of the polluter pay principle : industry and agriculture contributions
- Control of wastewater price (benchmarking, savings, external financings, Moody's rating …)

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# Thank you for your attention !

www.aquawal.be

www.spge.be

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