



# *Practices and Guidelines on Wastewater Reuse in France- The State of Art*

**Dr Marcus Agbekodo**  
**(Deputy General Manager of Agence de l'Eau Artois-Picardie)**

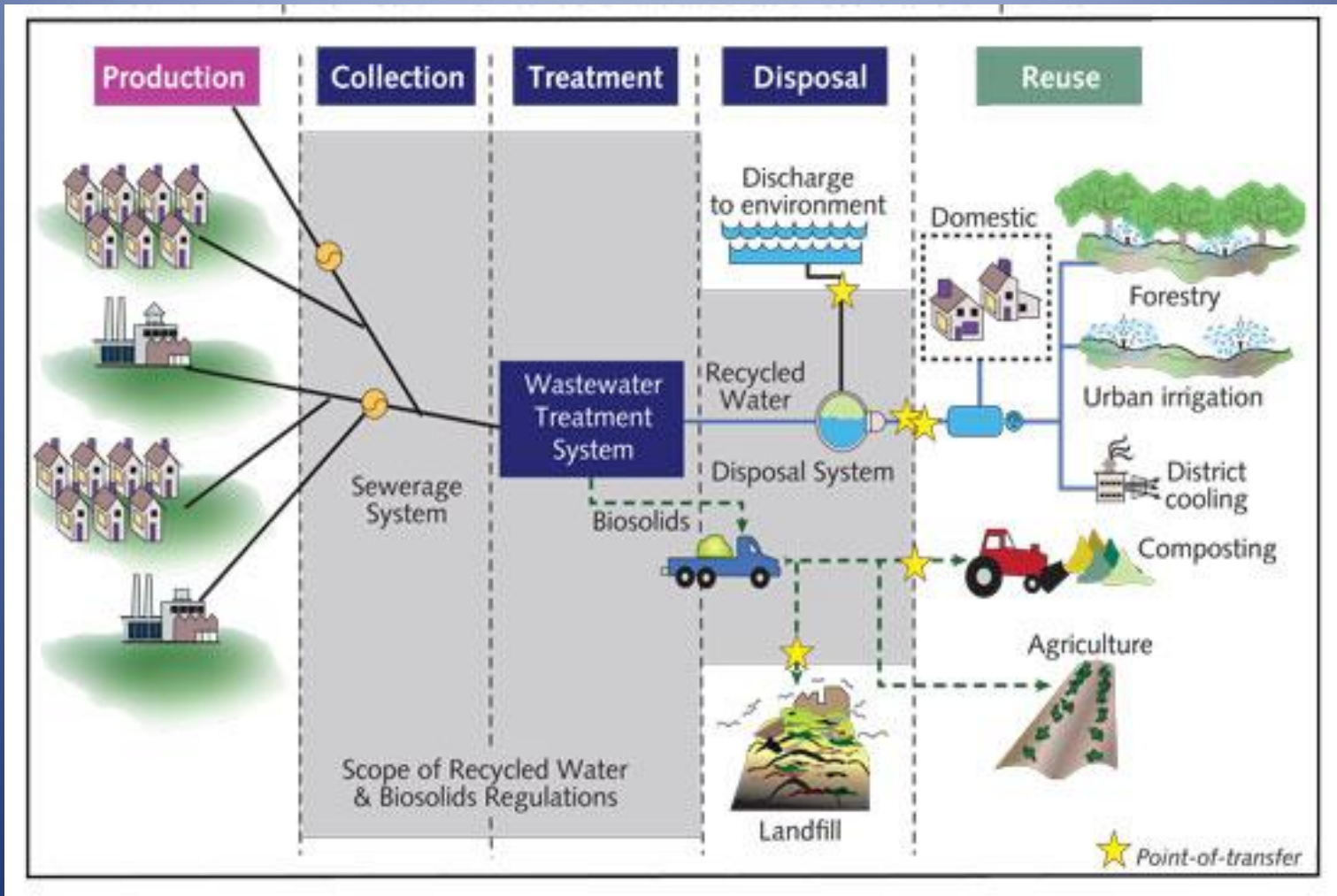
**Brussels, the EP intergroup – January 12, 2016**

# “Six French Water : “Agences de Basin” (Public Catchment Authorities)

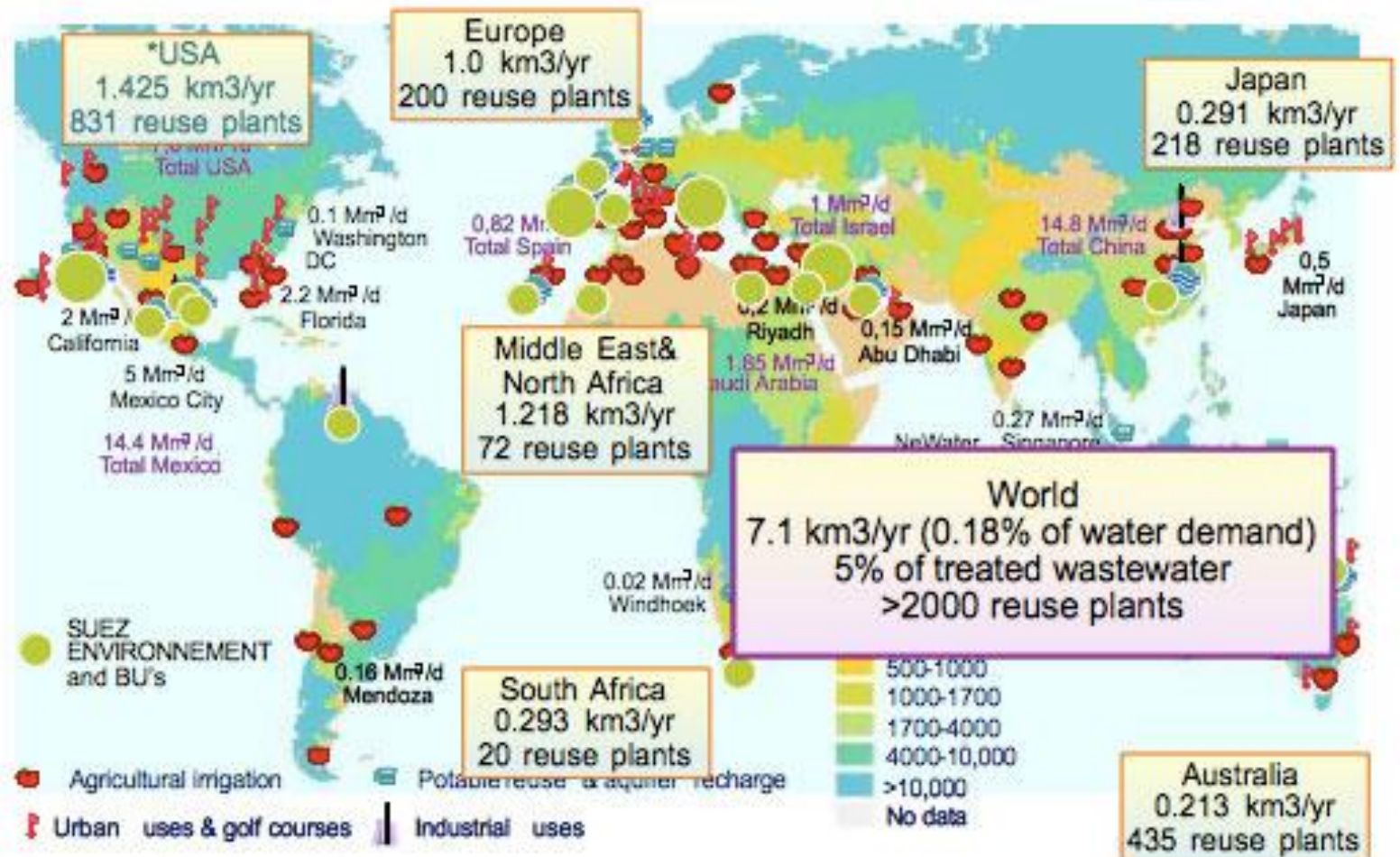


The Water Agency of Artois-Picardie collects around 200 millions euros every year from water taxes

# Water Reuse Principle

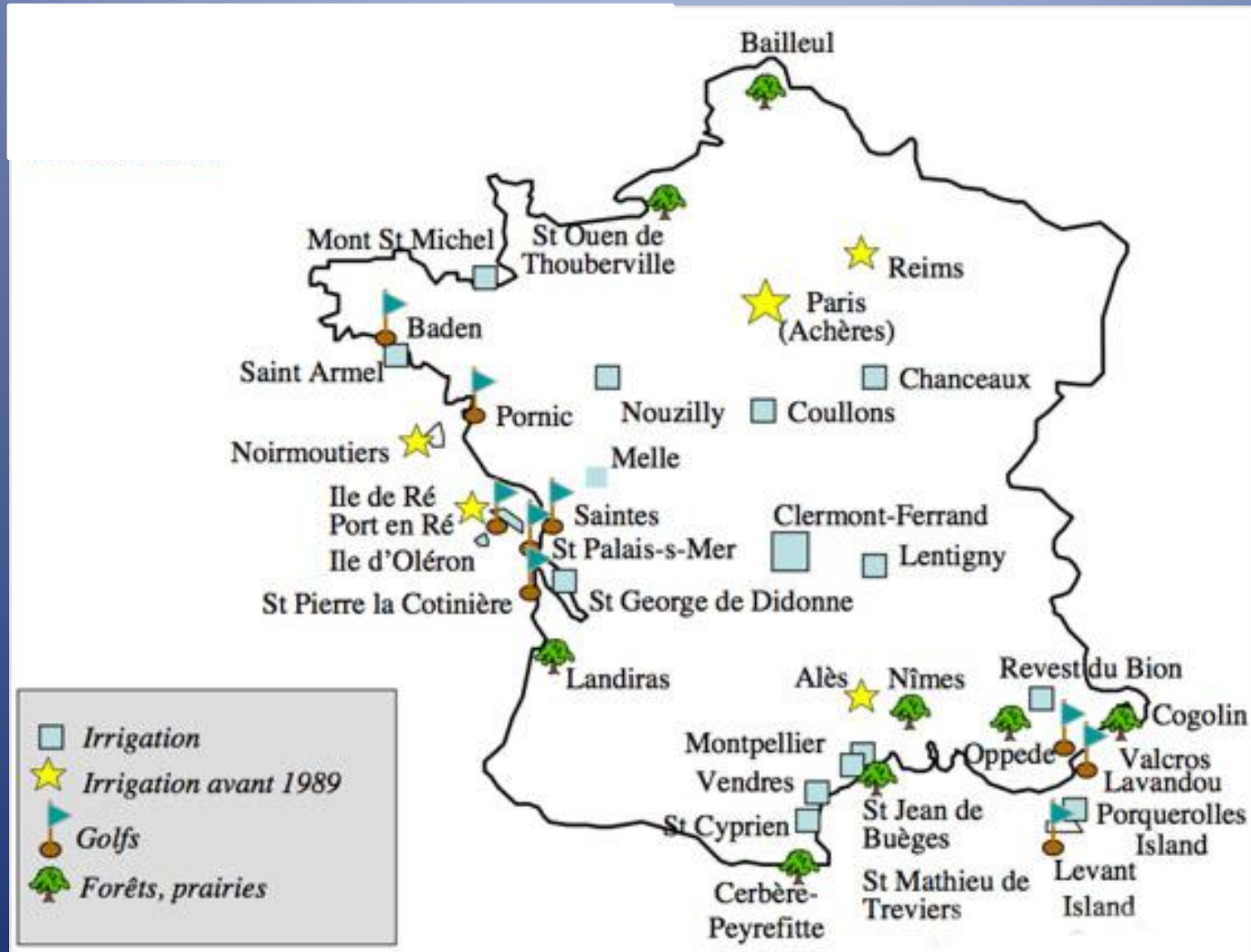


# Wastewater Reuse in the world



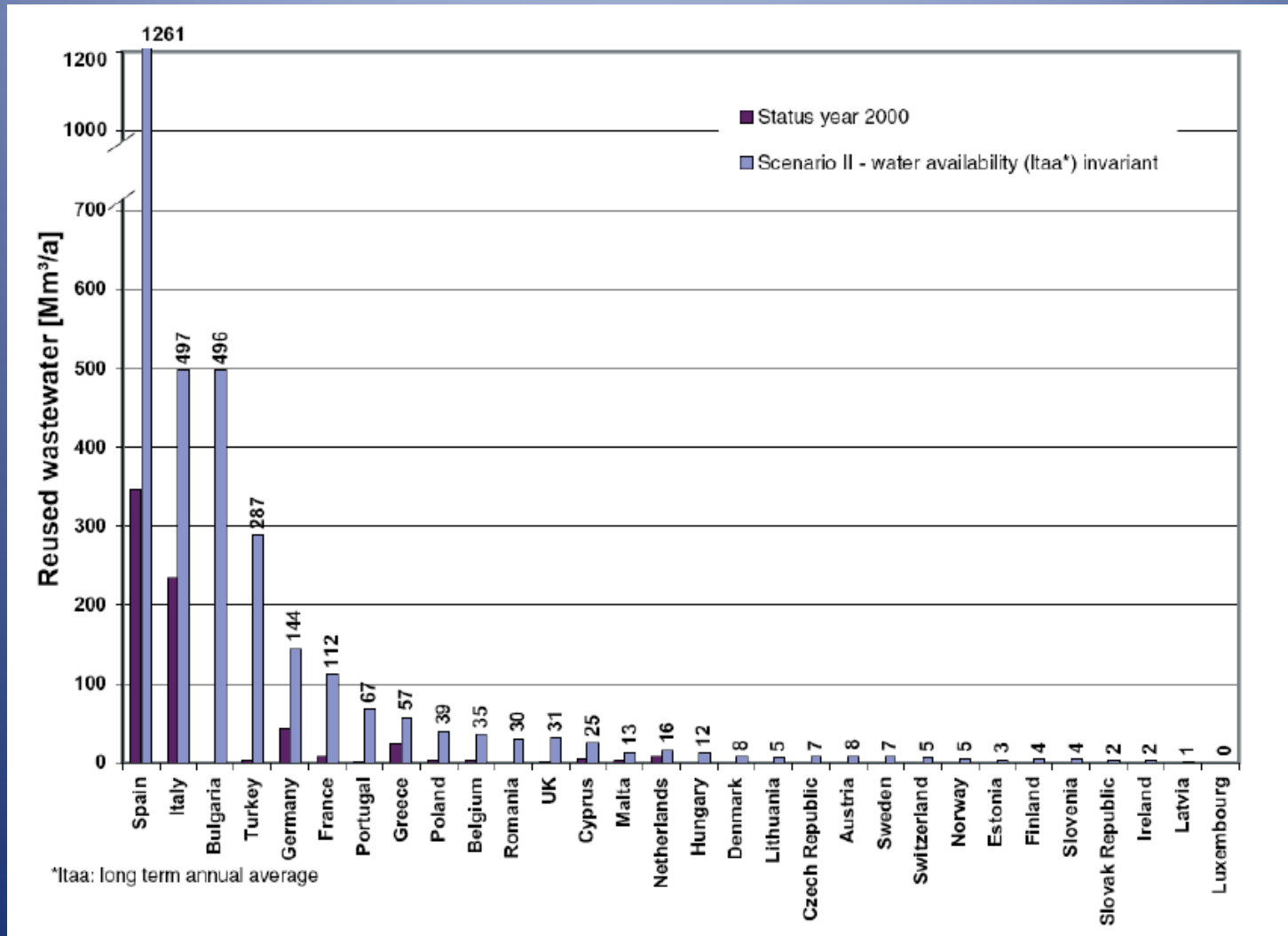
# Wastewater reuse practices in France

(Reuse implementation is not yet country-wide in France)



# Wastewater reuse potential of European countries on a projection horizon of 2025

(Reuse implementation seems to be very rare in France but the are a great potential)

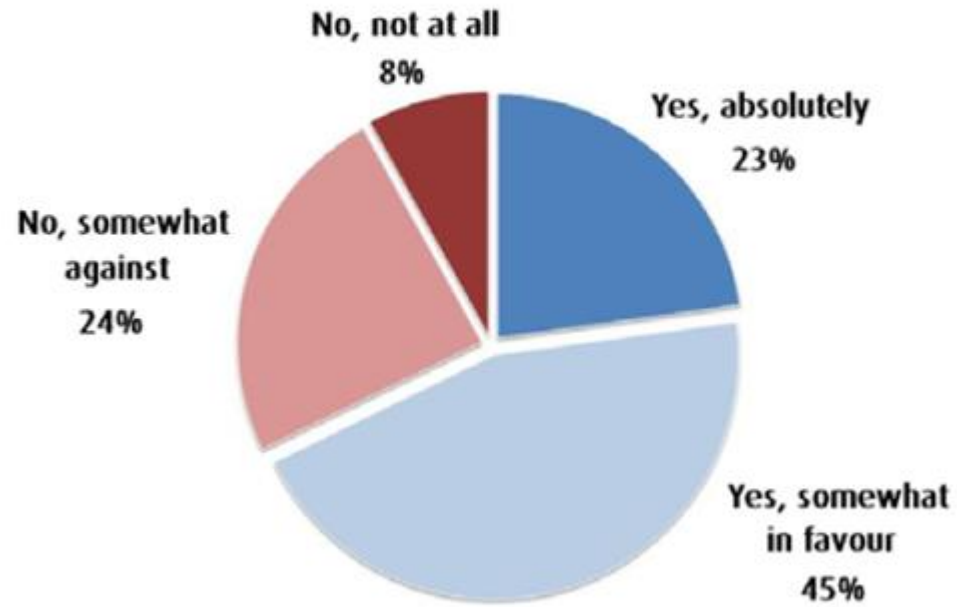


# Agriculture : Reusing waste water for irrigation in France involve local solution and critical situations

The uncertainty of the French population with regard to the social acceptability of the practice could slow down the development of water reuse in agriculture



Acceptability of the consumption of fruits and vegetables that have been watered with treated waste water with a view to participating in efforts to conserve water resources



Source: CGDD, May 2014, Survey results

# Golf course in France : Reusing wastewater for irrigation

The Golf course was one of the main field for wastewater reuse in order to face the drought periods in France and the increased pressure on the French freshwater sources during summer time





# Industry : Reusing waste water for process chain in France

As water for industrial applications becomes less easily accessible, industry is looking for ways to recycle and reuse treated water because wastewater is an attractive economic alternative and helps conserve and a resource commodity for future generation



# The French Regulation

- ✓ Because of this new interest for wastewater reuse, both French Ministry of Health and Environment in 2010 and 2014 decide to take two joint decrees (Arrêté of 2 August 2010 and Arrêté of 25 June 2014) relating to the use of water from the purification of urban waste water for the irrigation of crops and green spaces
- ✓ The French orders indicate that a file must be prepared to get permission before wastewater reuse from the health authorities.
- ✓ The French regulations follow the WHO Guidelines but add restrictions for irrigation techniques and set back distances between irrigation sites and residential areas and roadways.
- ✓ As a result, spray irrigation is strictly limited in urban areas. French Guidelines impose a stringent monitoring of the microbiological and chemical quality of reclaimed waters.

# French financing incentives

- ✓ Financial incentives for reuse projects in industry have been available from the “Agences de l’eau” as Water Catchment Public Authorities : **40% of subsidies or grant following EU guidance**
- ✓ The Regulations for water reuse in Agriculture, allow subsidies or grant when the conditions of irrigation procedures as well as the monitoring programs are defined and have the approval of the Superior council of public health of France.

# Conclusions and open issues

- ✓ The French guidelines seem to not improve the reuse of Wastewater due to the stringent quality requirements to avoid health risks. By establishing stricter guidelines for preventing human exposure through contact, The French guidelines are almost too restrictive and thus prevent country-wide emergence of reuse
- ✓ Taking health and environmental issues into account, it would be highly recommended to set up EU best practices and Guidelines related to the reuse of treated wastewater.
- ✓ The path of water reuse will certainly be followed by many regions in Europe within an appropriate financing incitatives and social acceptance.



**Thanks!**

**Merci!**

*[m.agbekodo@eau-artois-picardie.fr](mailto:m.agbekodo@eau-artois-picardie.fr)*