

Real Time Monitoring and Modelling Web Platform For Water Reuse Optimization In A Context of Managed Aquifer Recharge and Soil Aquifer Treatment

Antea Group

Understanding today.
Improving tomorrow.



Speaker

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Context

Results of the project AquaNES (H2020)

<http://aquanes.eu>



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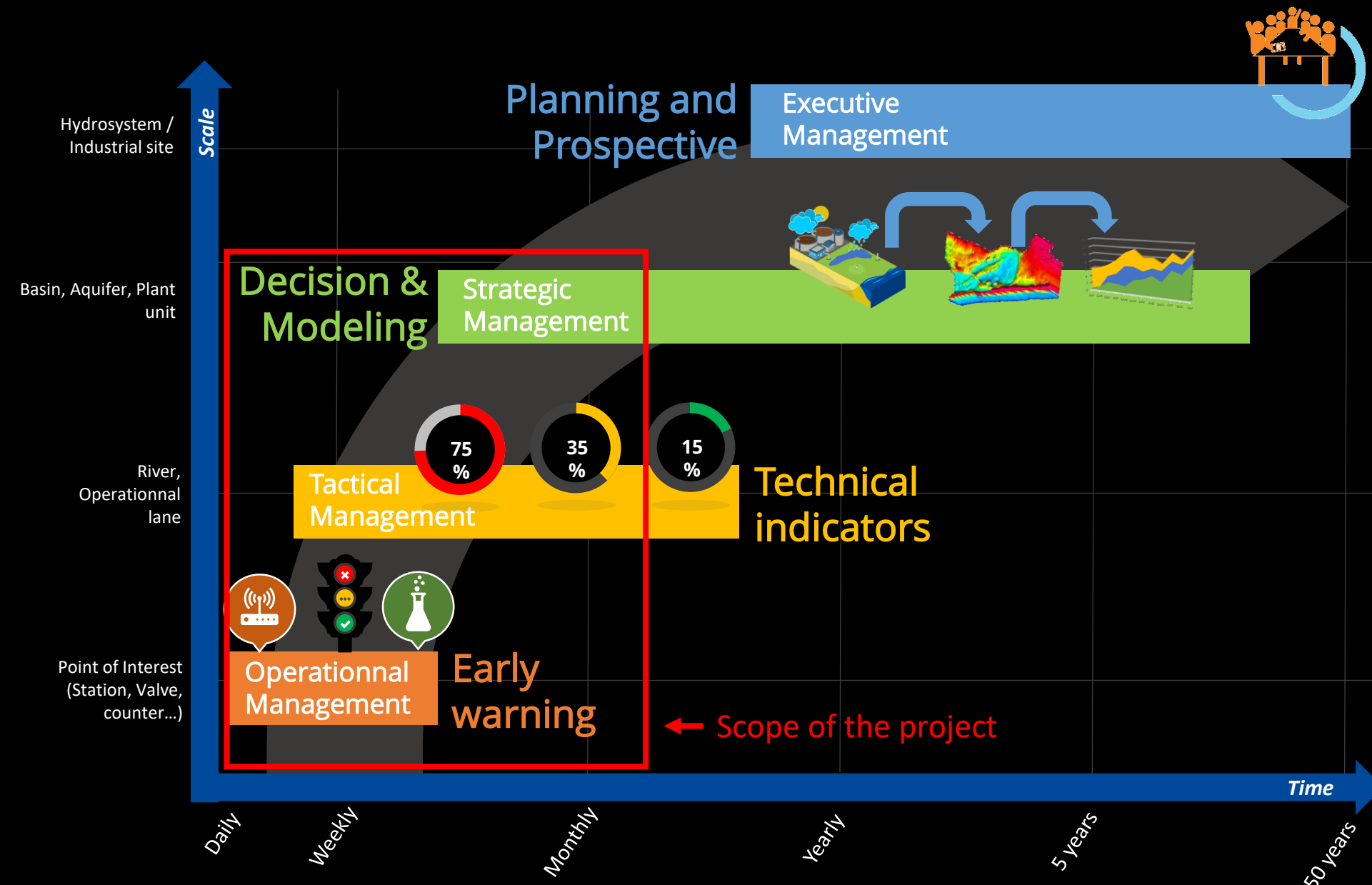


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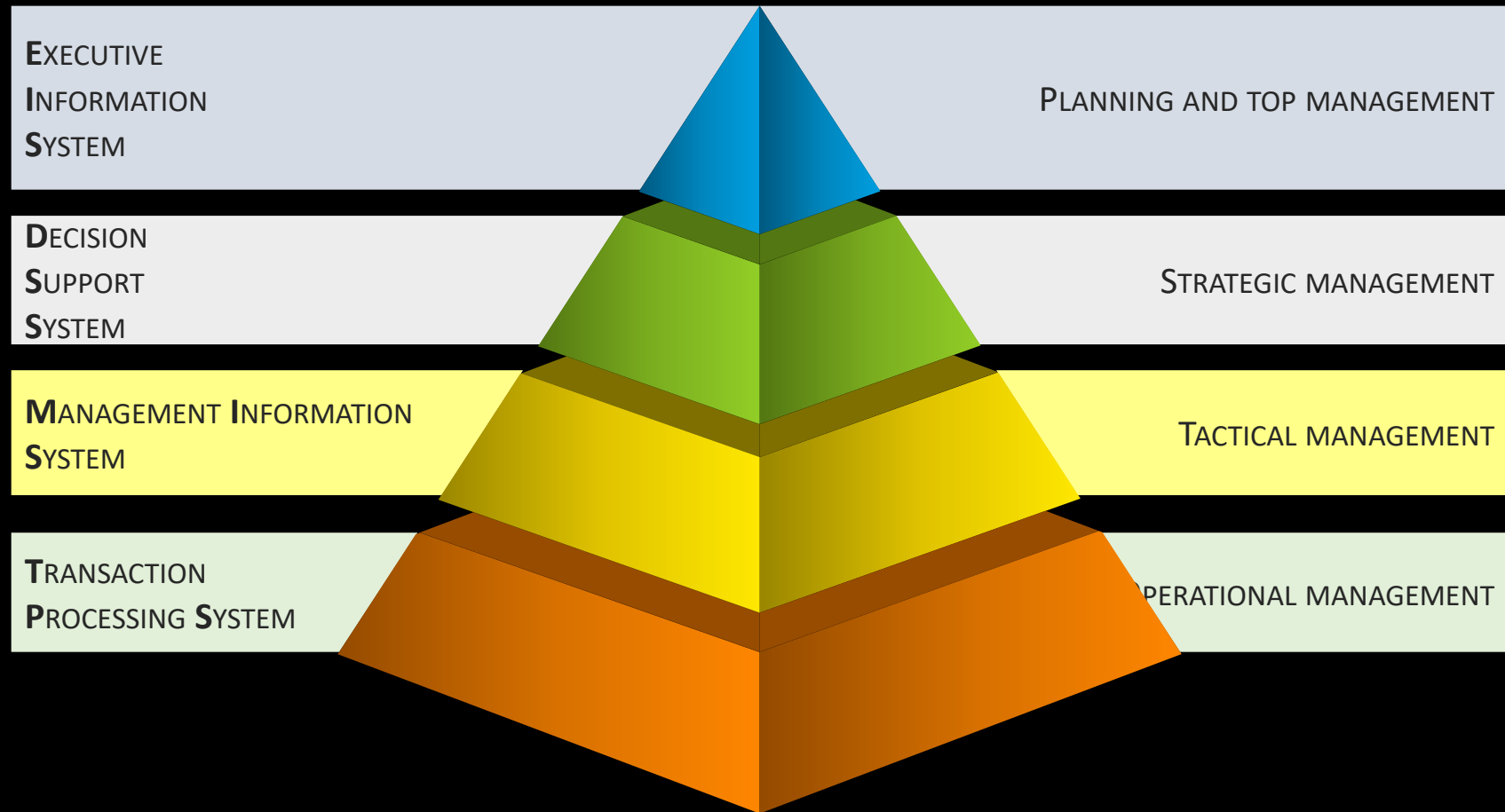
ICT for MAR/SAT optimization & water reuse

A question of time and scale for water management



ICT for MAR/SAT optimization & water reuse

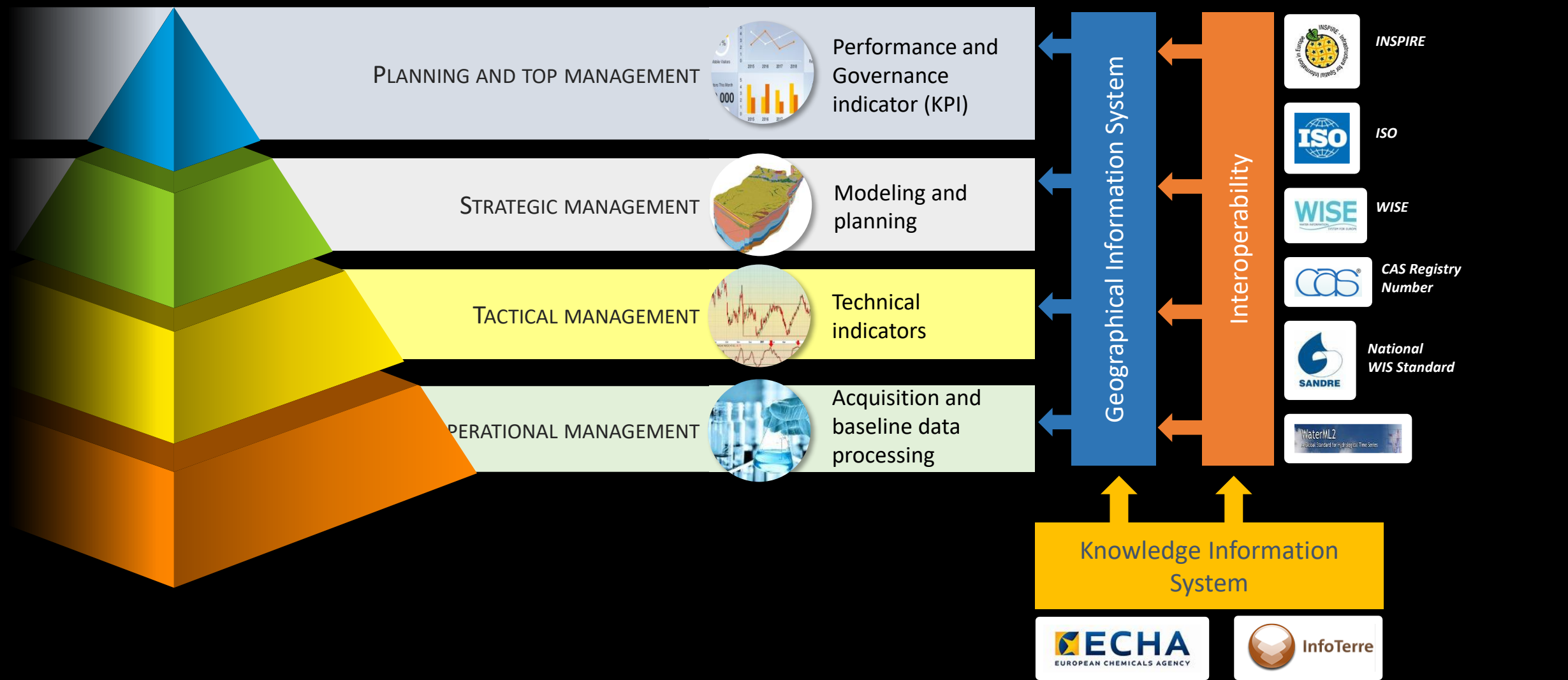
Global approach



Conceptual Pyramid of Information System

ICT for MAR/SAT optimization & water reuse

Global approach



ICT for MAR/SAT optimization & water reuse

Global approach



Business Software

+

for



Engineering Services

**MAR/SAT
optimization
&
water reuse**

ICT for MAR/SAT optimization & water reuse

Demonstration site for AquaNES project

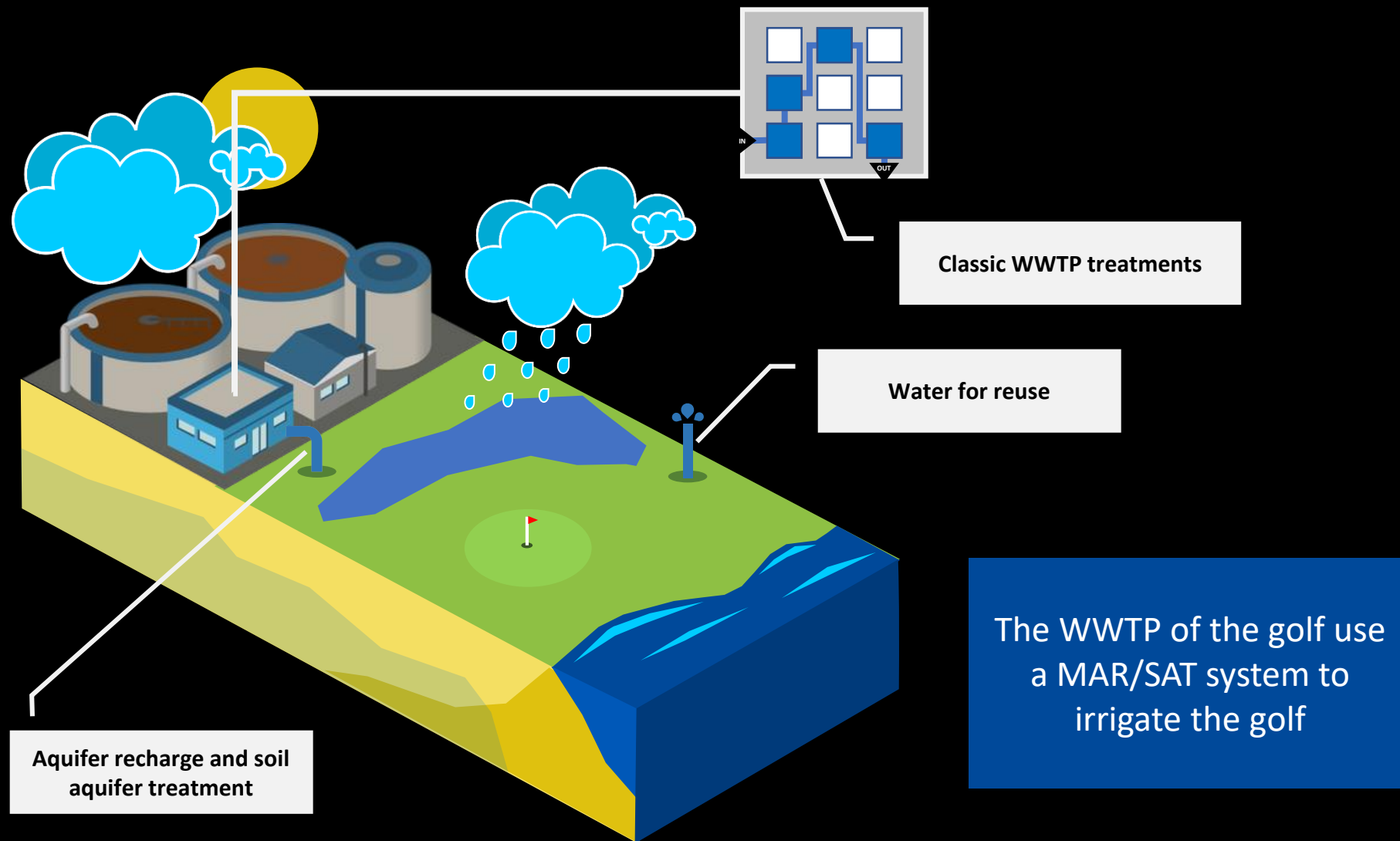
Demonstration site : Agon-Coutainville (FR)



The study site is located in France in Normandy on the golf of Agon-Coutainville on the shoreline

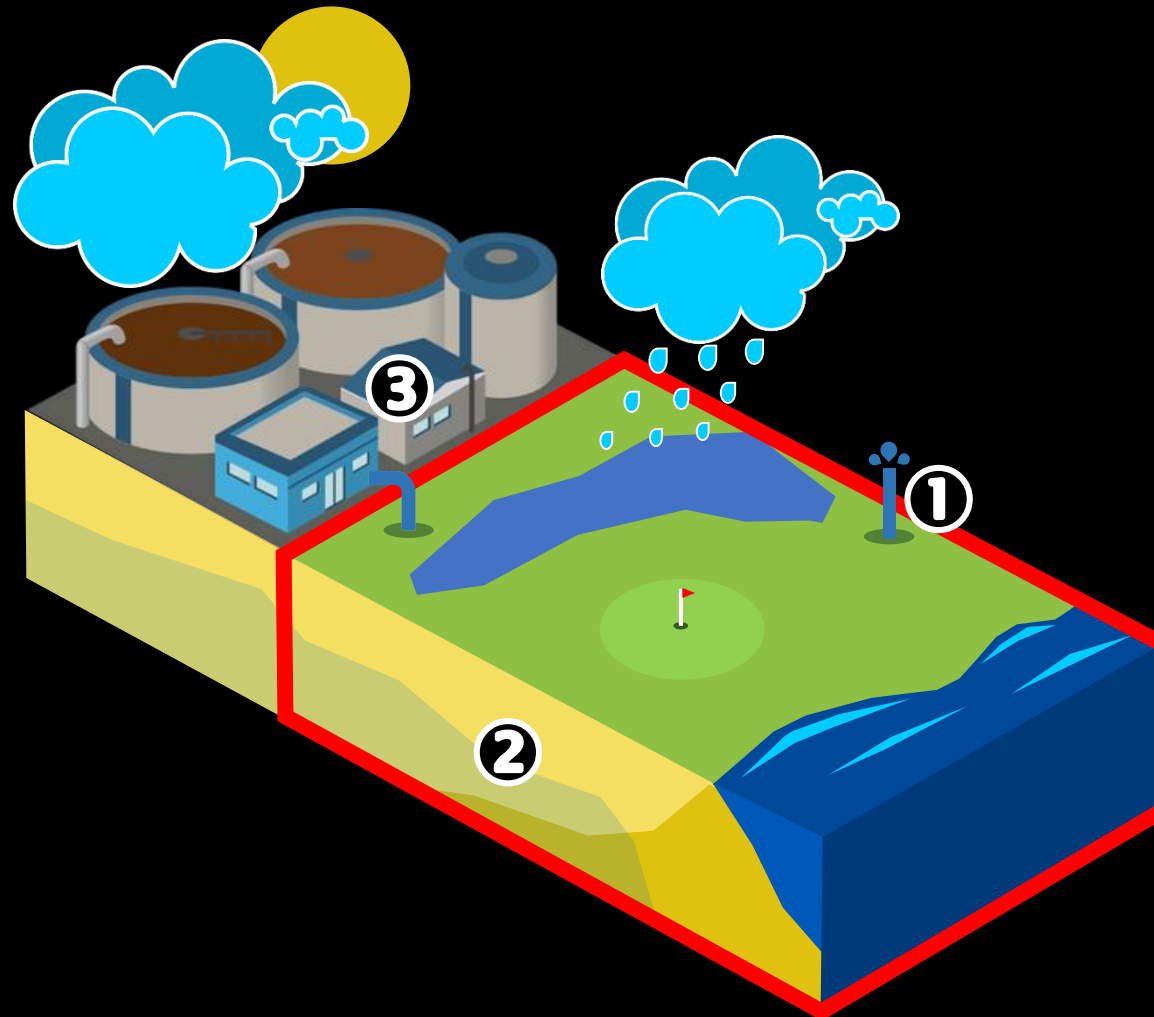
ICT for MAR/SAT optimization & water reuse

Combined Natural Engineered Systems dedicated to golf irrigation



ICT for MAR/SAT optimization & water reuse

Combined Natural Engineered Systems dedicated to golf irrigation



Can we use the water for the golf ?



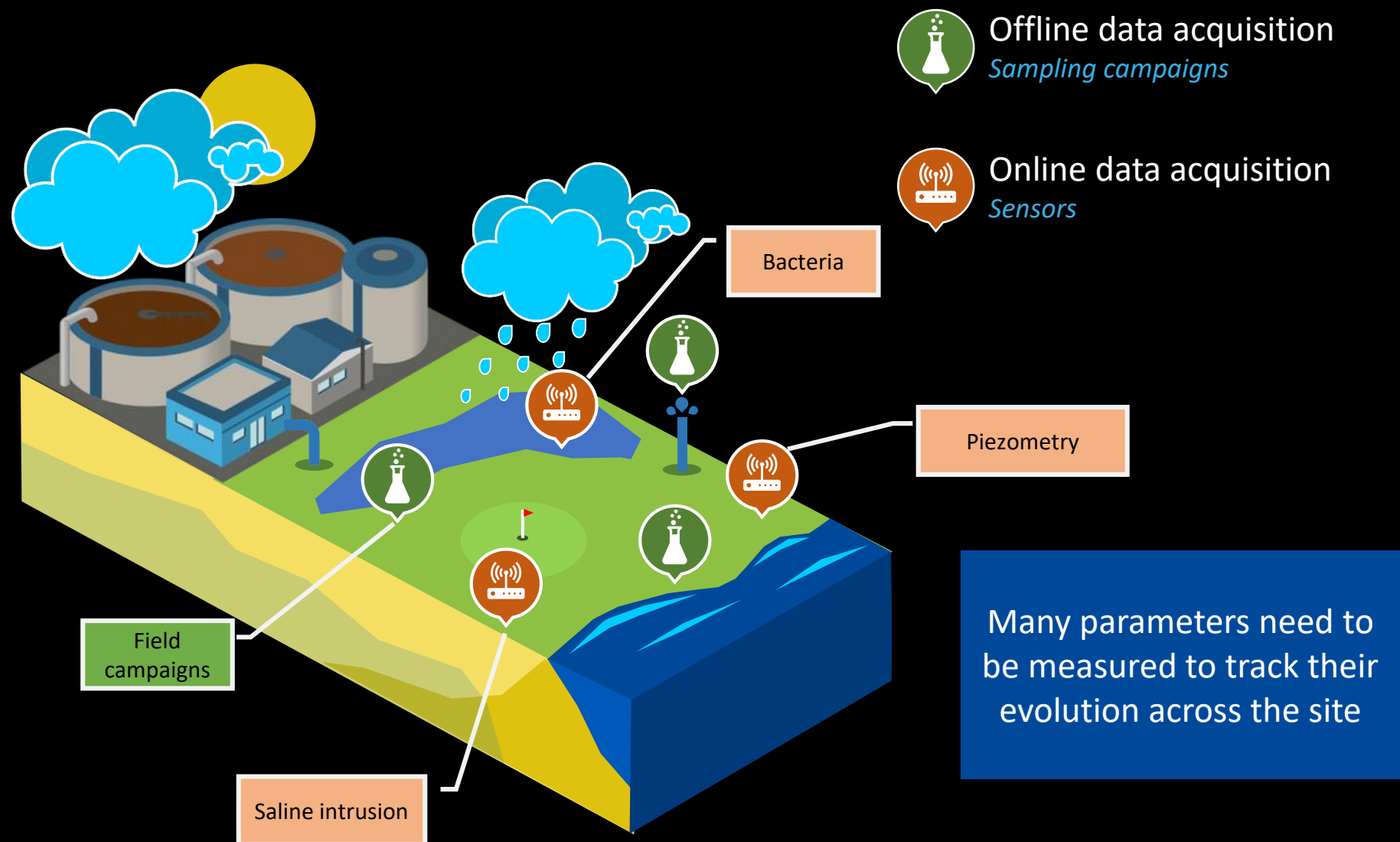
What append in the soil ?



How to predict and plan ?

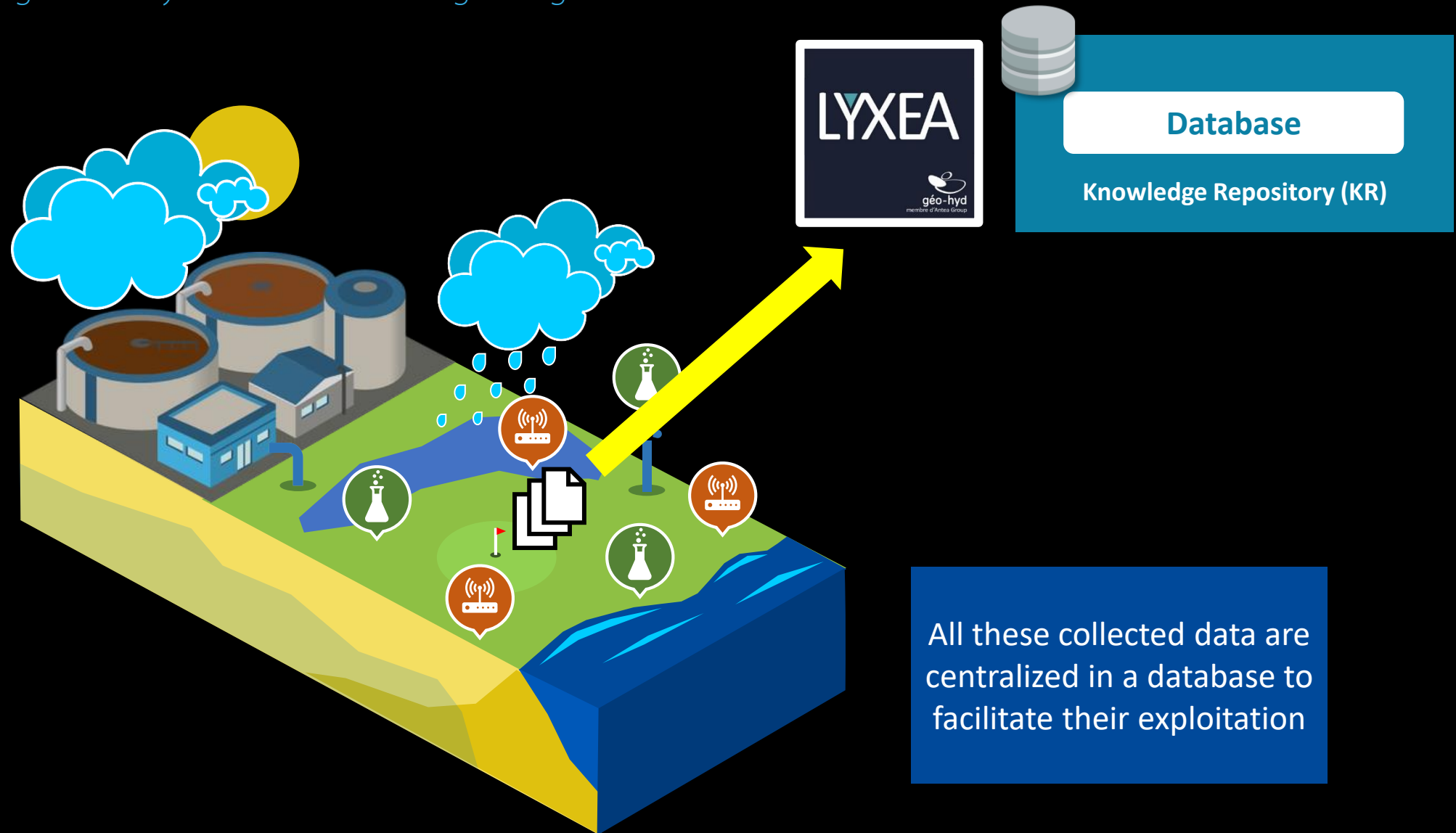
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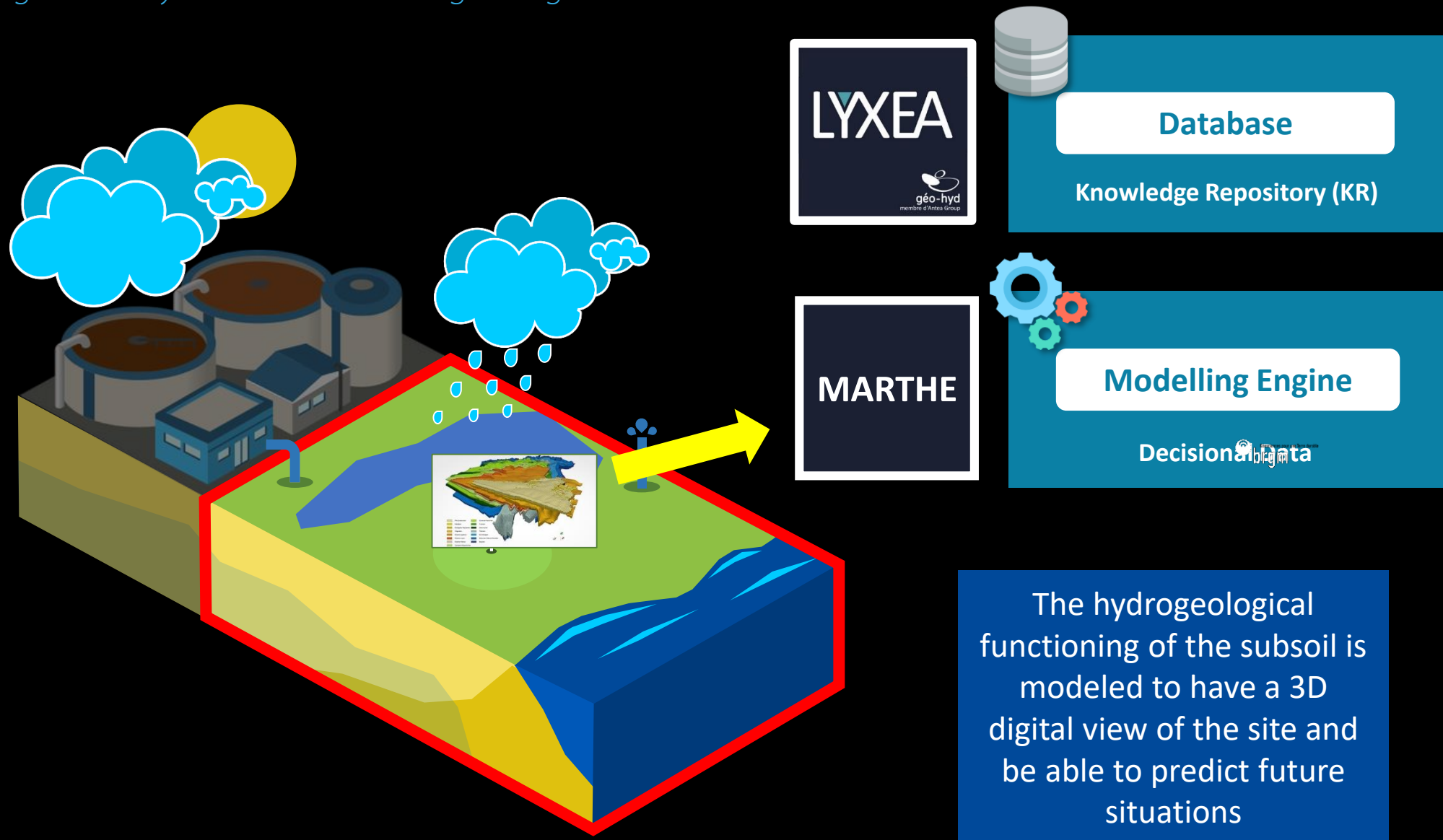
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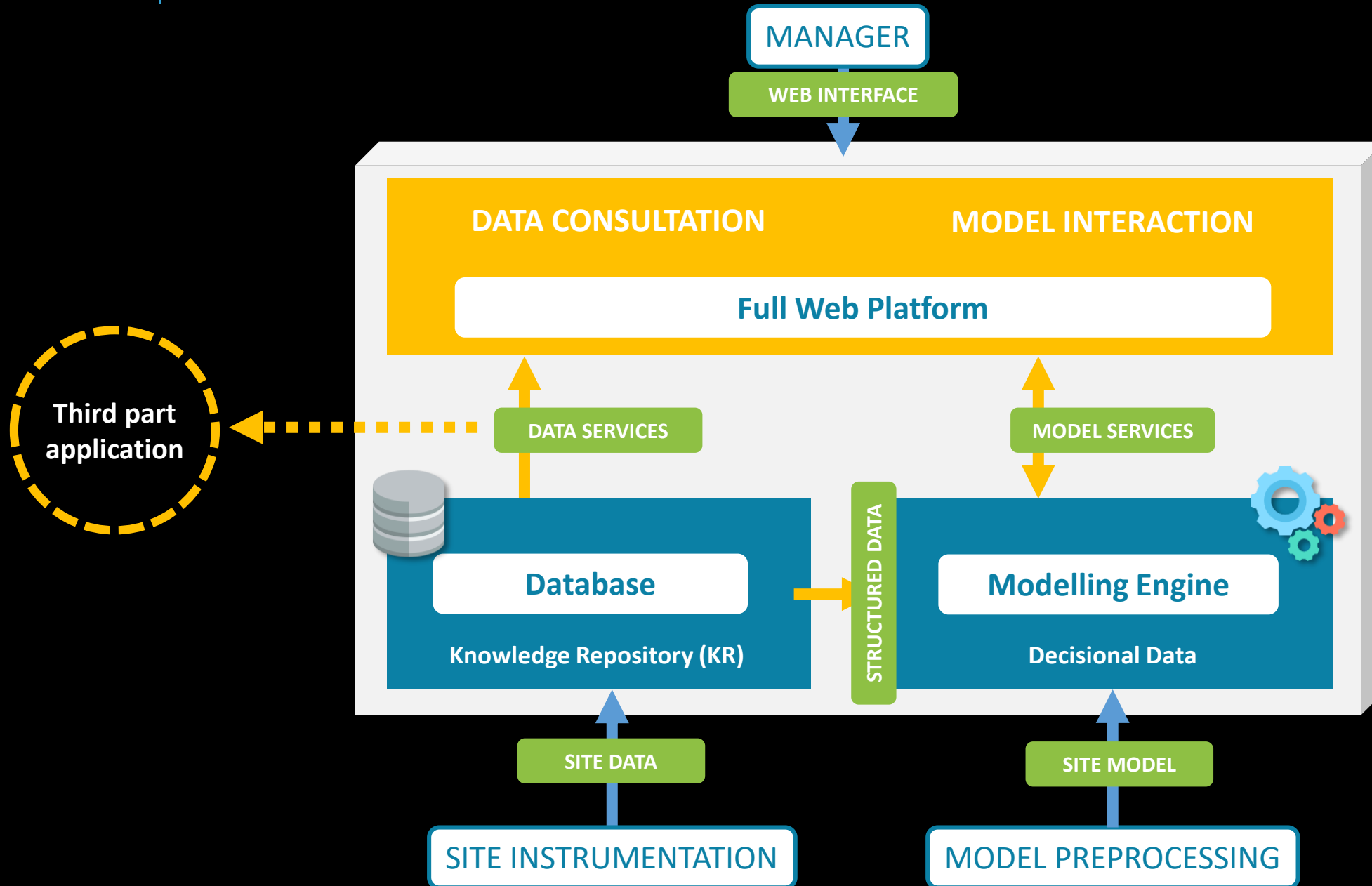
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ICT for MAR/SAT optimization & water reuse

Software - Components architecture



Screens

Admin

root45

🇬🇧

Edit

AGON MAR-SAT

Welcome to the Agon MAR-SAT System web platform.
Here you can access data and explore the system performance

TREATMENT PROCESS COMBINATION

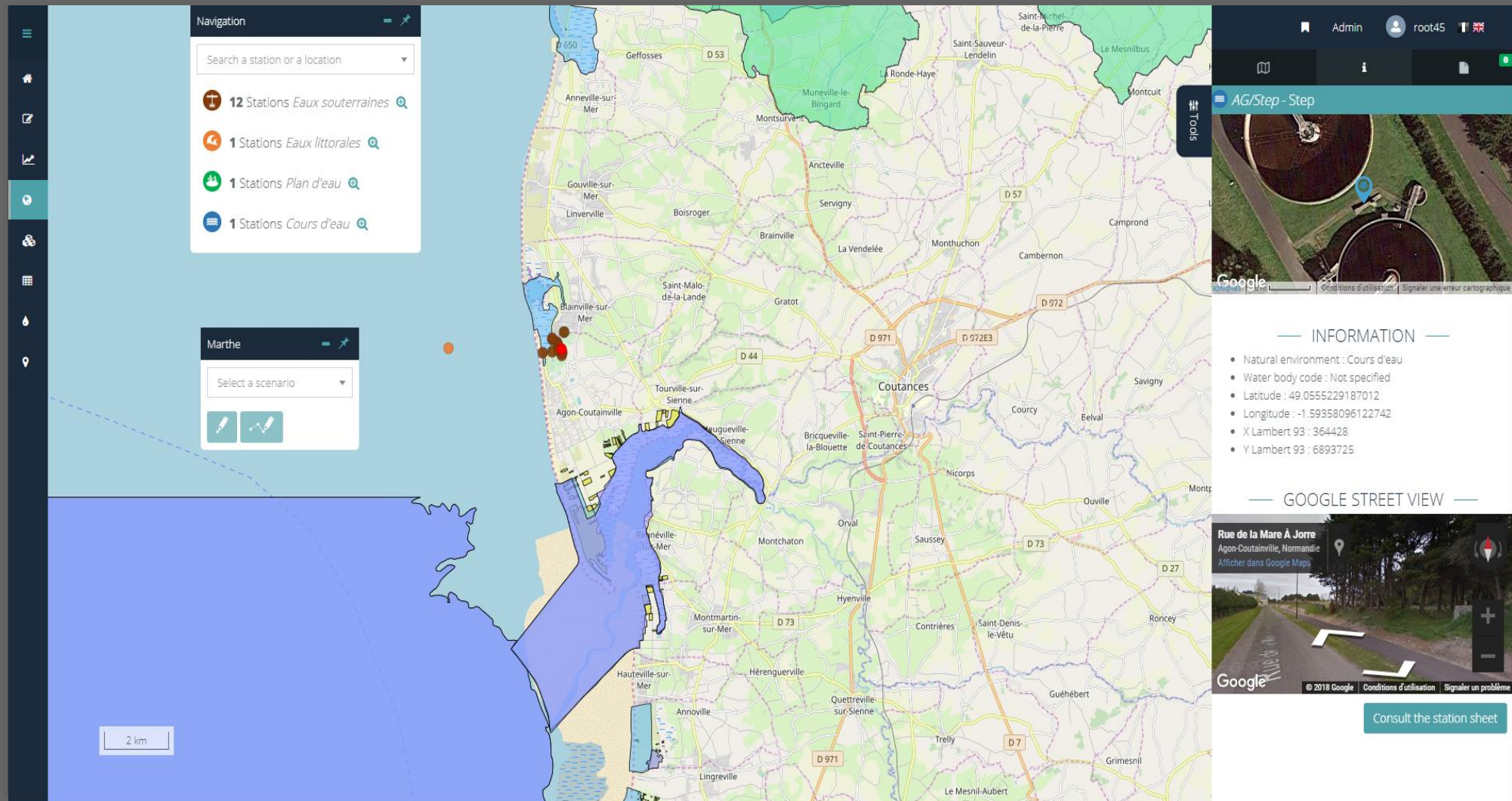
AgonMAR-SAT

Lyxea Web 2.2.0

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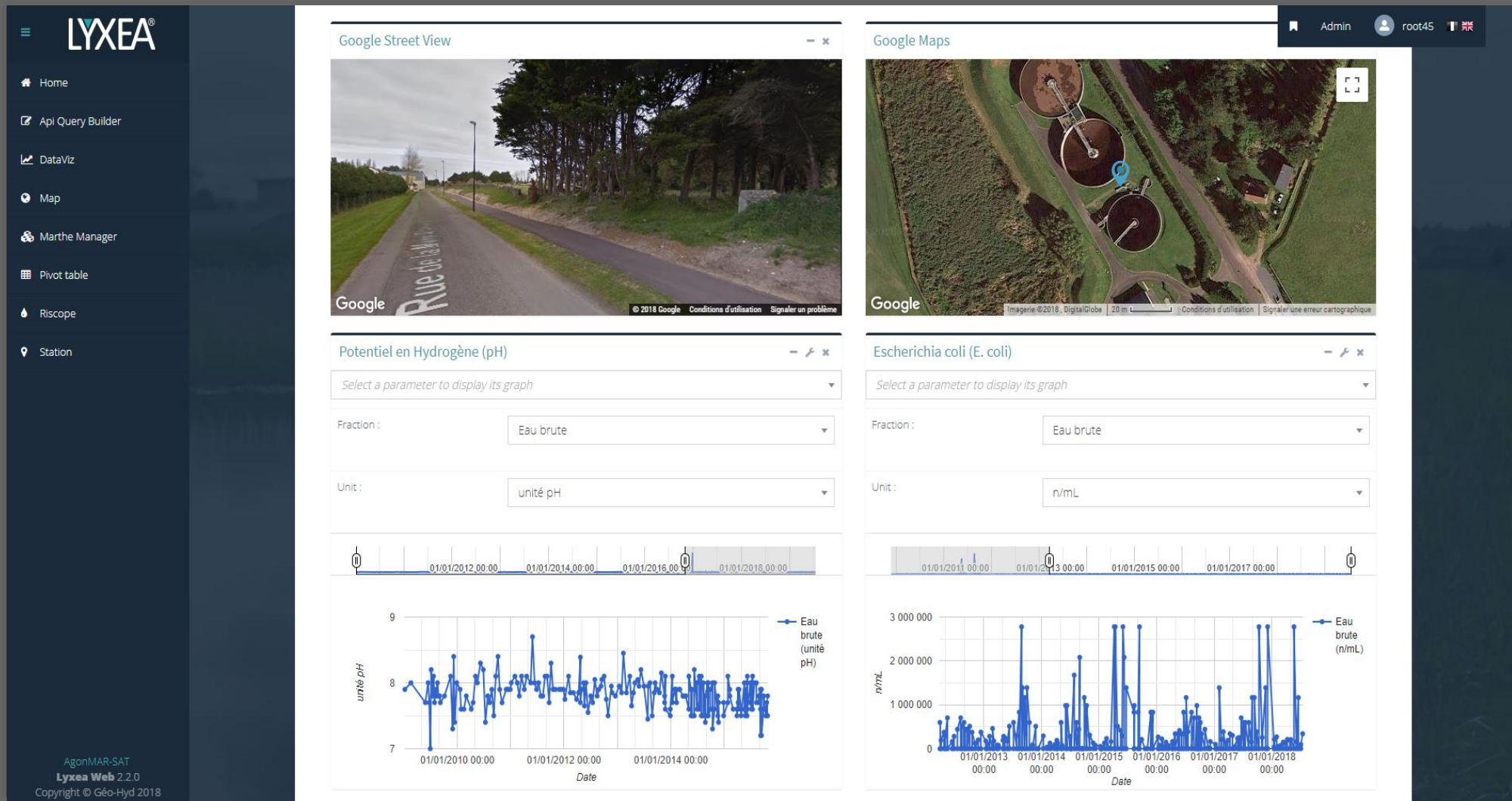
ICT for MAR/SAT optimization & water reuse

Screens



ICT for MAR/SAT optimization & water reuse

Screens



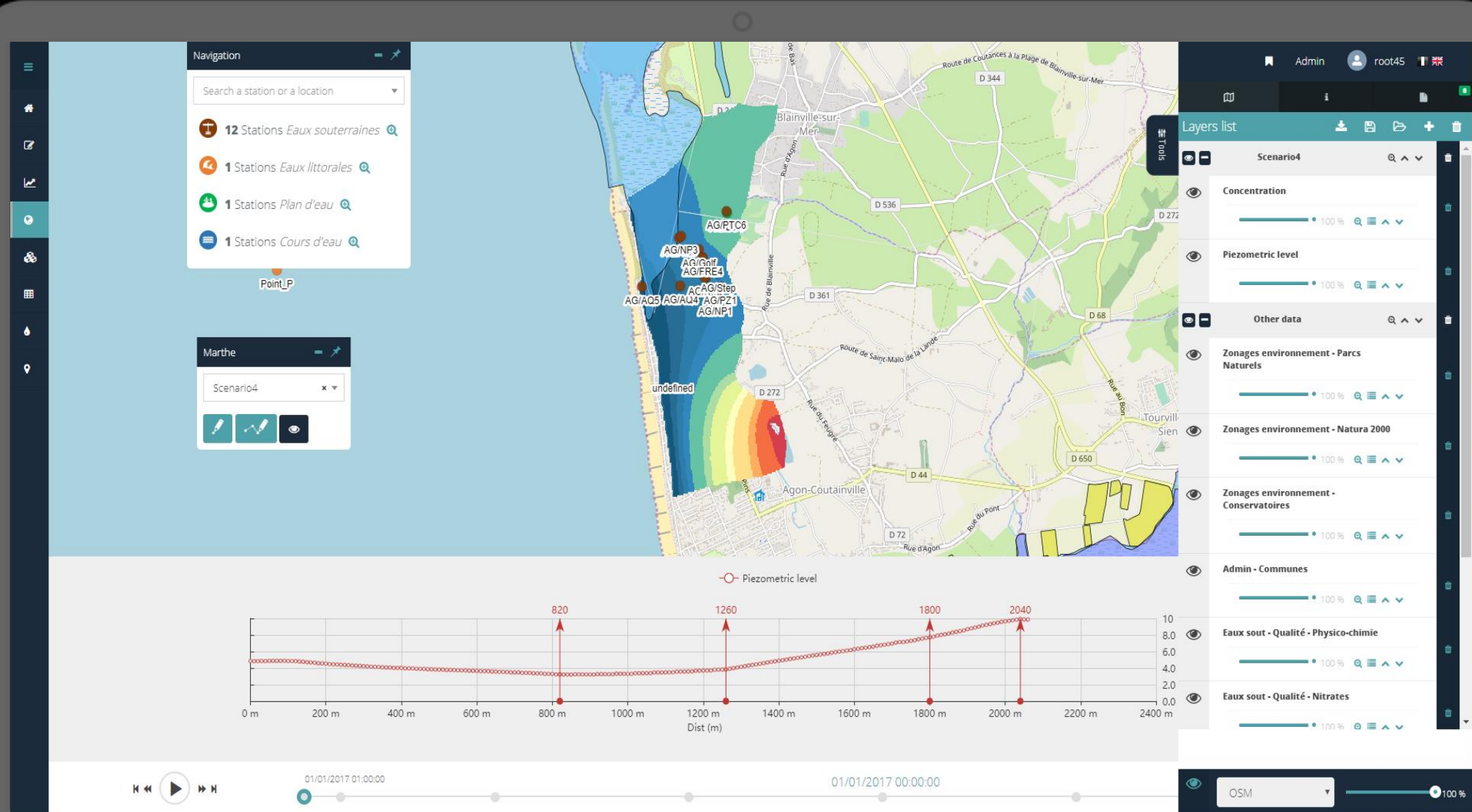
ICT for MAR/SAT optimization & water reuse

Screens



ICT for MAR/SAT optimization & water reuse

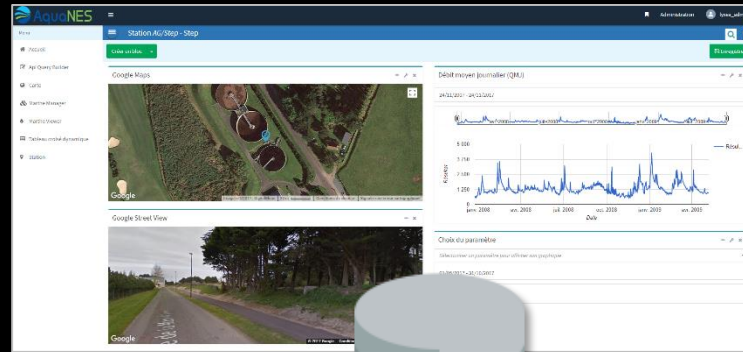
Screens



ICT for MAR/SAT optimization & water reuse

Final product - Combined ICT solution & Engineering services

Dashboards

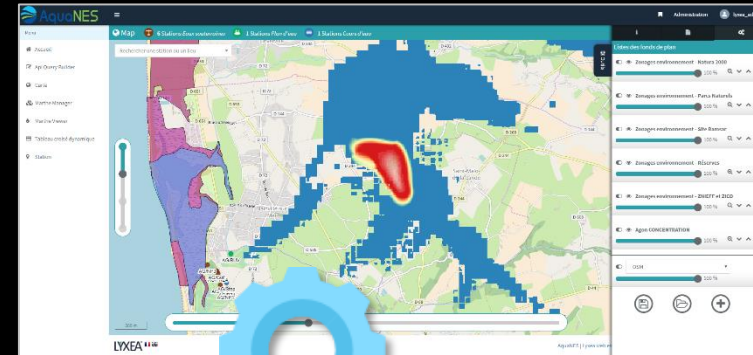


Database
(Lyxea)



Data update

Modelling execution & visualisation

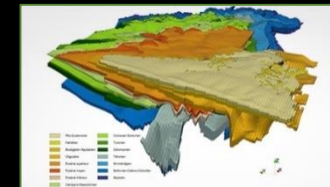


Modelling Engine
(Marthe)

Monitoring platform

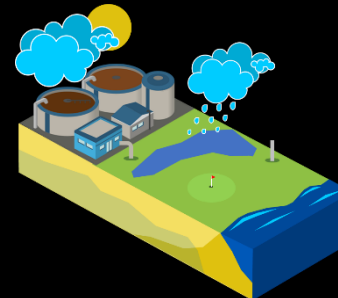


Data Acquisition



3D Model

Site settings



ICT for MAR/SAT optimization & water reuse

Final product - Combined ICT solution & Engineering services

Service delivery



Web Solution

SaaS or On-Premise



Engineering Services

Data acquisition + Site modelling

Monitor

Settings

MAR/SAT
optimization & water reuse
For
Agon-Coutainville



Thank you !



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