

INTRODUCTION

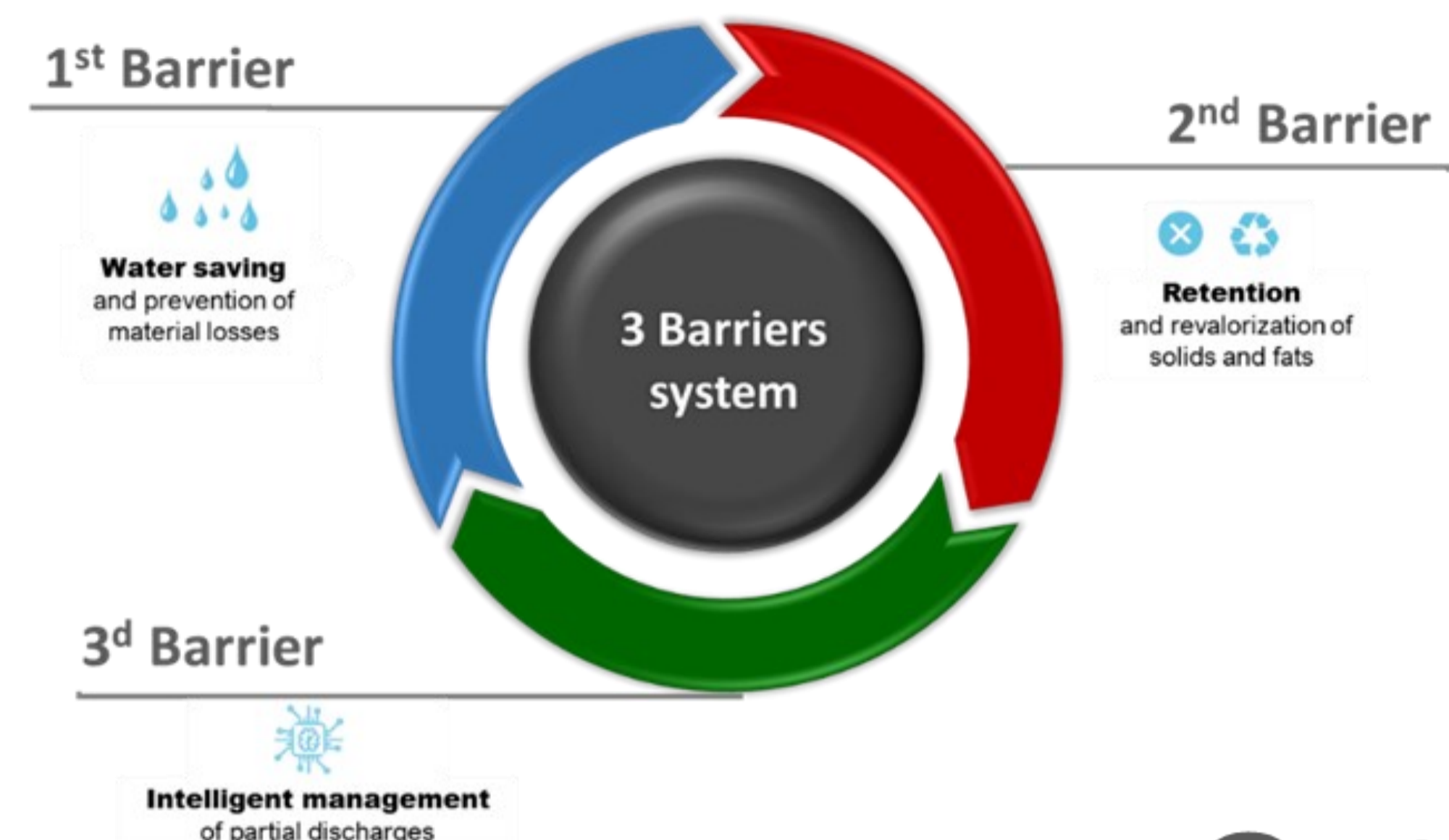
PROBLEM: The high percentage of the industrial sewage from fish canning SMEs industry in the urban WWTP, with high organic and saline loads, very difficult to treat properly for its disposal to the environment.

SOLUTION: The controlled integration of industrial effluents into the urban sanitation system with the pollution reduction at the origin and the implementation of the Real Control System (RTC), high organic and saline load discharges from the SME's canning industry in the urban sanitation system.

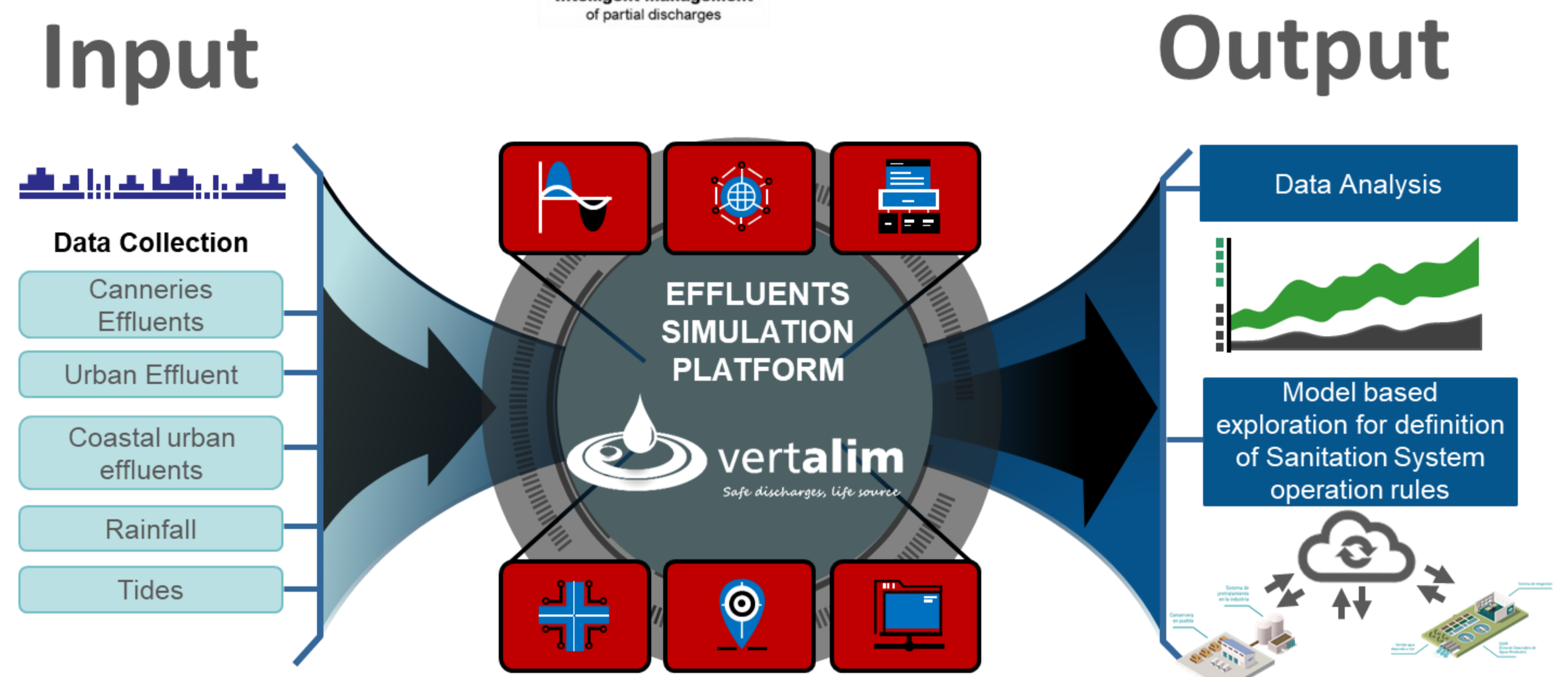
INCLUSIVE ASPECT: It brings together all the stakeholders to reach an integral solution jointly: Canneries, Water management entities and Administrations.

TECHNICAL APPROACHES

1 3 Barrier System: Implantation of a specific methodology for more efficient production based on preventive and corrective strategies for water saving and effluent pollution reduction.



2 Implementation of a Remote Management System in the sanitation network for the remote management of the different discharges, based on the modelling of the collector network and the WWTP.

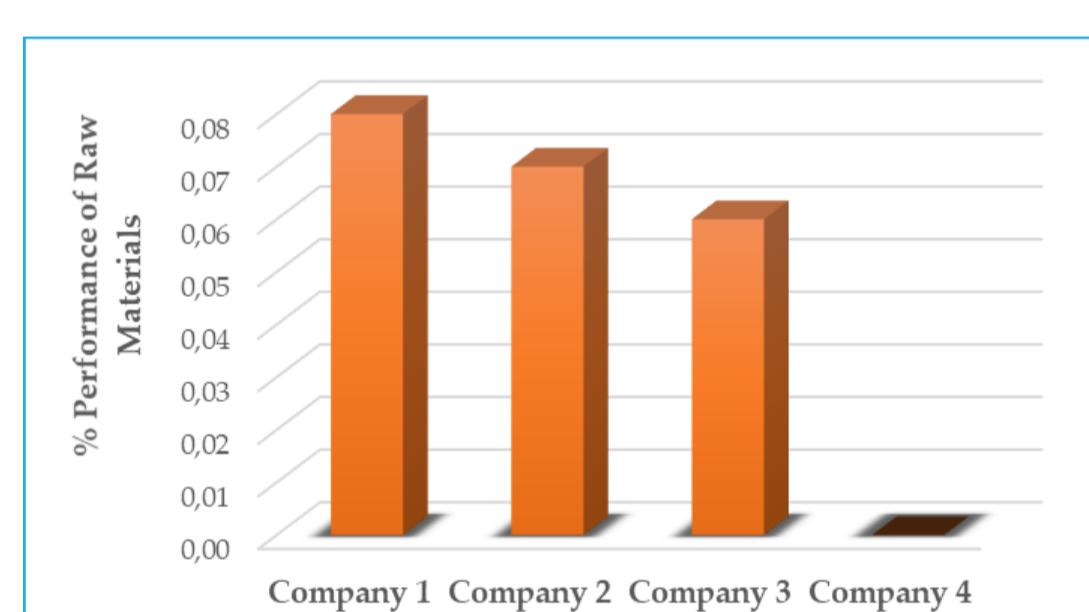


RESULTS AND DISCUSSION

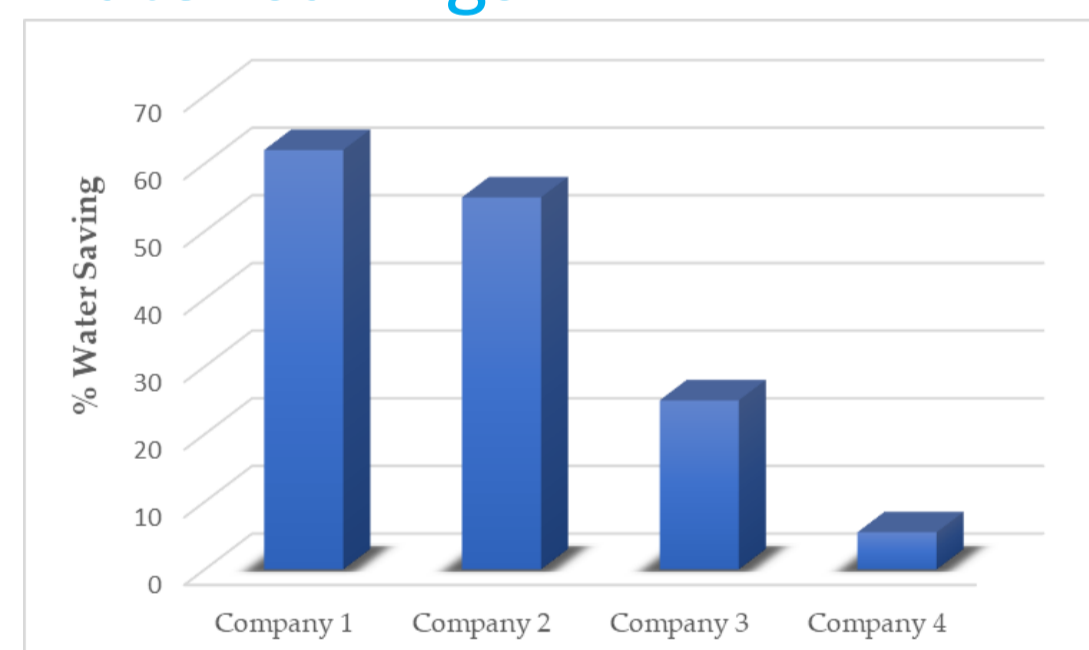
Impacts of holistic solution performance

LEVEL 1 _ Tuna canning industry

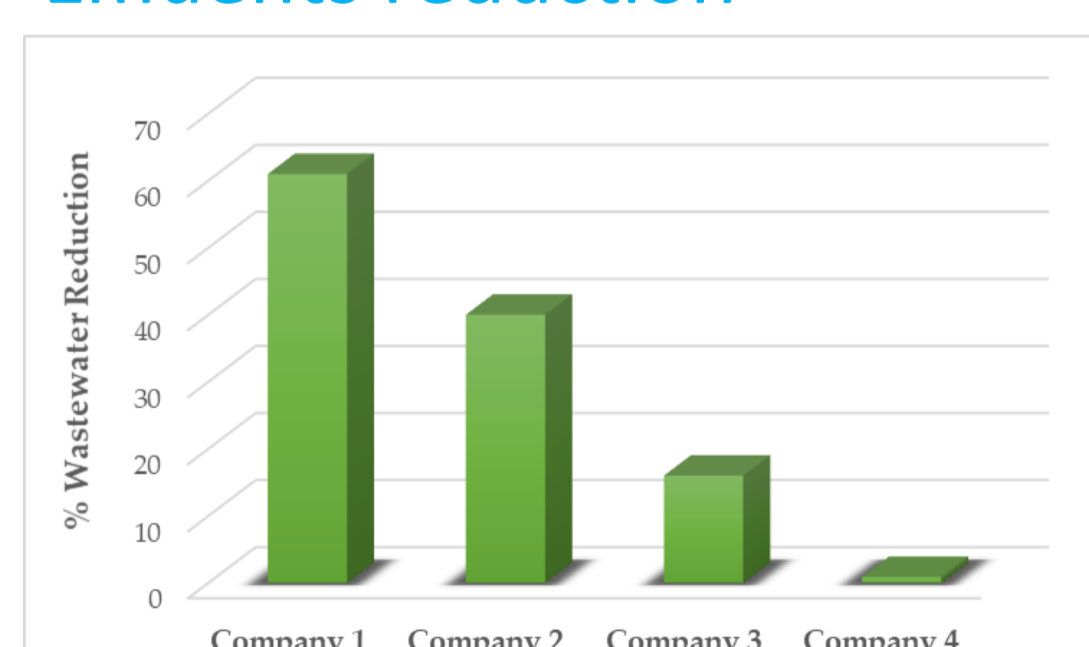
Production yield



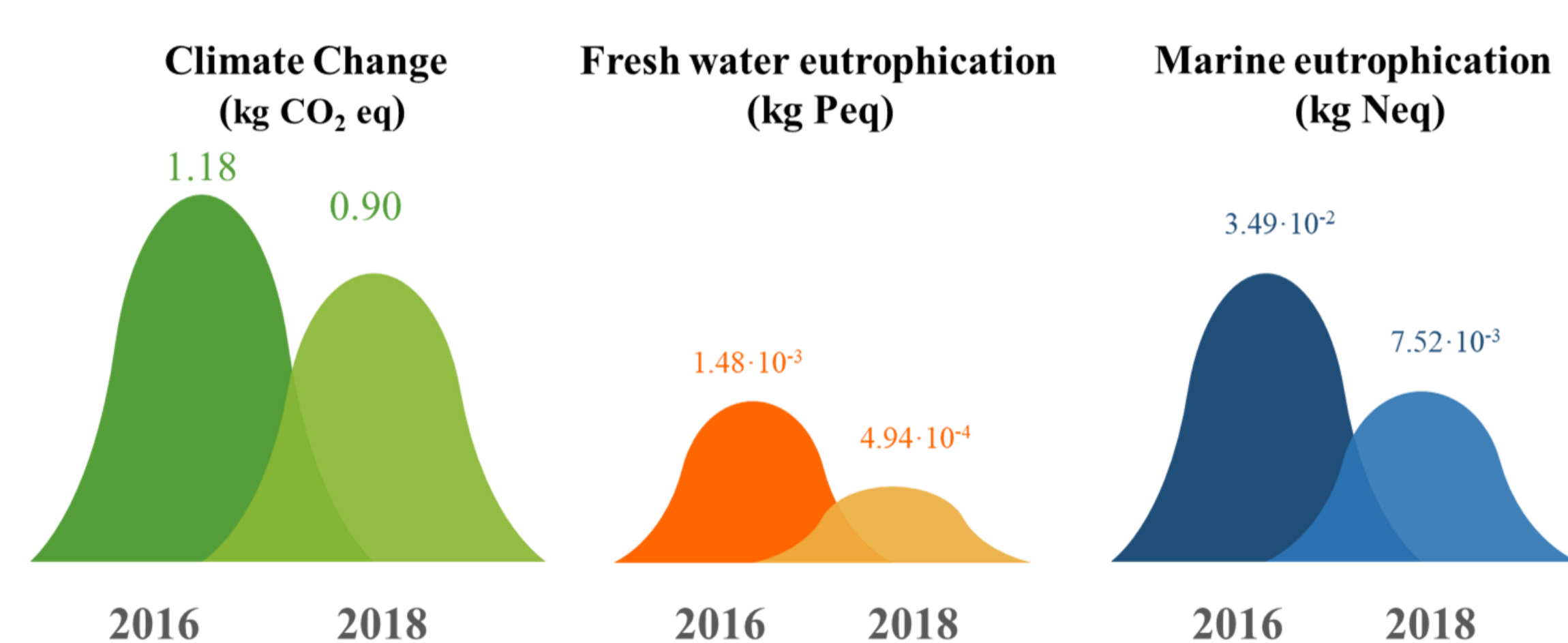
Water savings



Effluents reduction

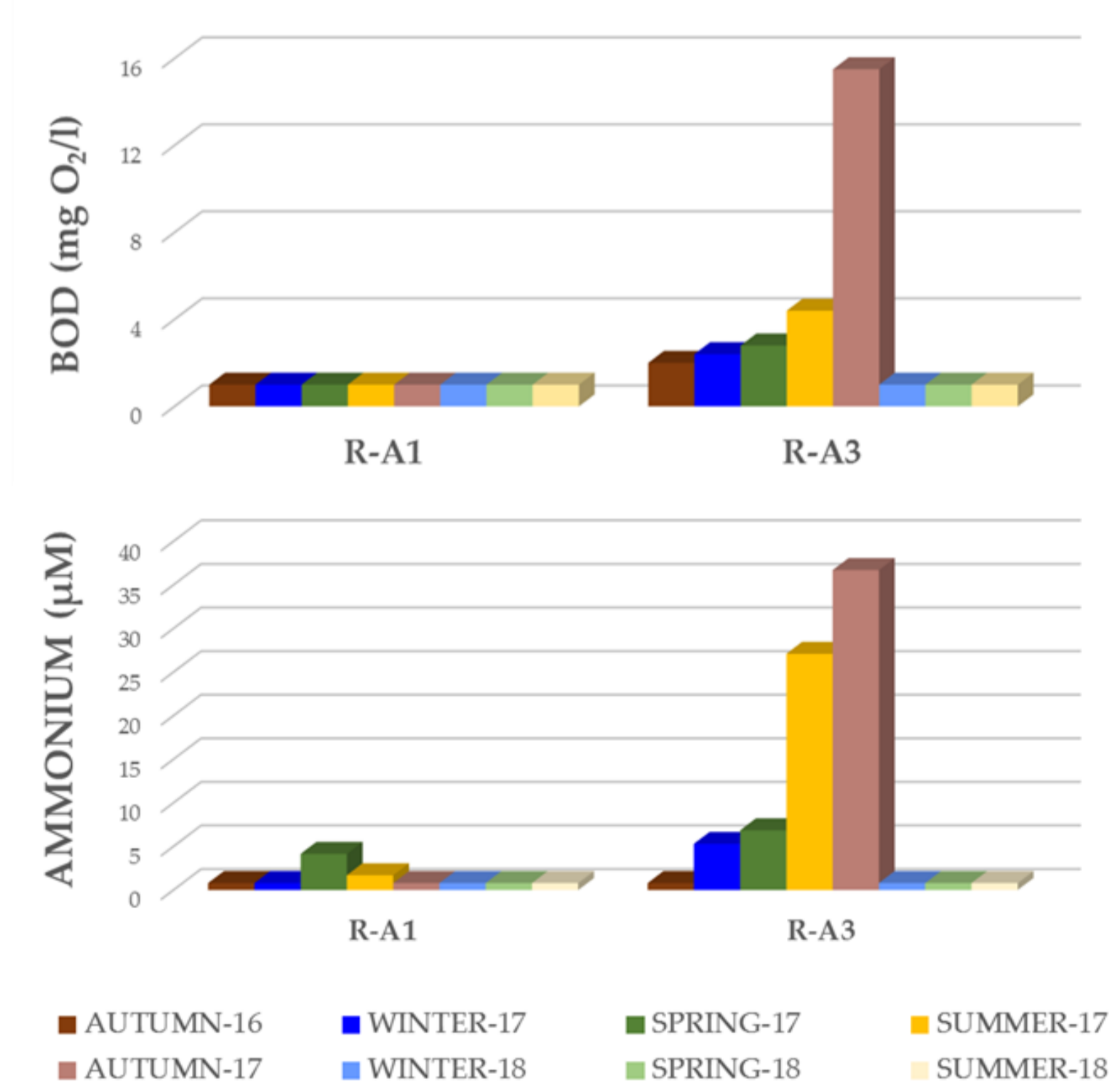


LEVEL 2 _ Sanitation system



Variation of the Environmental impacts for treatment of 1 m³ of effluents before and after the Project implementation

LEVEL 3 _ Environment



BOD and NH₃ sampling campaigns upstream and downstream the industrial area

CONCLUSION

The performance of this project has enabled an improvement in the efficiency and productivity of the companies. In addition, the pressure on water sanitation infrastructures was reduced and the performance of urban WWTPs was optimised through the control and remote management of discharges throughout the entire sanitation network. It is a good demonstration of minimisation at source and the safe integration of wastewater from food sector SMEs into the municipal sanitation system, without damaging the sewer network or the WWTP.



Acknowledgments: This research was partially funded by European LIFE Programme (LIFE15 ENV/ES/000373 agreement), and by URA (The Basque Water Agency).

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