

VisioNing: from an idea to a successful project

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Every day huge amounts of agro-industrial wastewater are produced, in most cases never treated before disposal, and practically never reused. This causes an enormous environmental impact. In addition to water waste and pollution problems, it should be noted that agro-industrial related activities are also responsible for the leakage of valuable nutrients¹, in which farms invest in annually.

Moreover, in recent years, the cost of soil nutrients has risen exponentially, and for some of them, such as phosphorus, we are experiencing a dramatic period of crisis that put the global food production chain at risk. Wastewater treatment sector and that of fertilizers' production account for over 3% and 1.2% of world's energy². Moreover, fertilizer costs are continually growing as they are related to the energy cost and population growth. This represents a significant economic damage for companies in the sector.

For many years our team has cared about these issues and has worked to find sustainable solutions.

At the beginning of 2022 the academic team focused its efforts to realize an innovative solution capable of purifying agro-industrial wastewater, simultaneously recovering nutrients, to convert a problem into an opportunity. Some months later, VisioNing project was born thanks to Seed for Innovation (S4I), scouting program of the University of Milan and the UNIMI Foundation, in collaboration with partners from the world of innovation and finance. In 2023, VisioNing's Proof of Concept development was among the 20 PoC investments made by Farming Future and the first VisioNing plant has been engineered.

The incubation phase has been crucial for the engineering of the product and the optimization of the applied technologies.

While numerous wastewater treatment solutions exist, our combined technology offers dual benefits: energy efficiency and recyclability. This empowers us to position ourselves as frontrunners in sustainability and innovation, ensuring a 30% reduction in operational costs compared to traditional systems.

While the process for patenting the technology is still underway, in 2024 VisioNing SRL was founded.

References:

[1] J. R. Jones, J. A. Downing, Agriculture. Encyclopedia of Inland Waters 2009, Volume, 225 – 223.

[2] https://www.caprari.com/wp-content/uploads/2023/07/Trattamento_acque-reflue.pdf.