



# POULTRY



## Are you struggling with...

- Complex treatment of highly-contaminated wastewater
- High energy consumption
- High OPEX costs



## Fluence's solutions...

- Respect the environmental legal limits
- Produce the minimum possible quantity of sludge
- Recover the maximum possible quantity of energy
- Reduce the costs of electricity and thermal energy



## Fluence offers...

- Primary water treatment and potabilization solutions
- Wastewaters treatment plants
- Anaerobic digestion plants which generate energy from by-products and wastewater
- Wastewater reuse solutions
- 20 years of experience designing custom project-based plants

# GIVE YOUR WATER VALUE

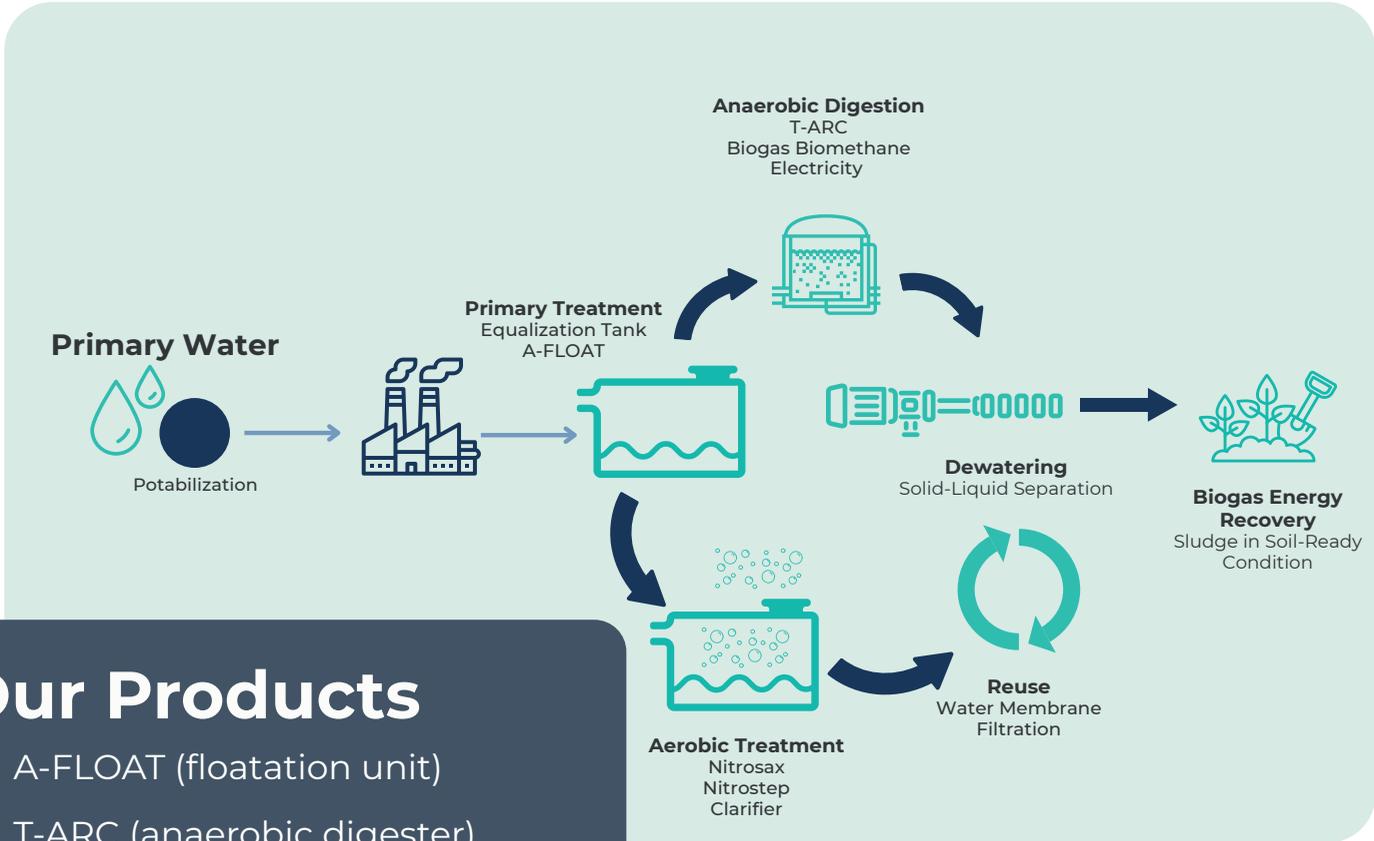
## Value from Waste

Production	Biogas (68% CH <sub>4</sub> ) Nm <sup>3</sup>	Boiler MMBTU	Electrical energy kWh	Thermal energy kWh	Biomethane Nm <sup>3</sup>
1.000 chickens/day	21	0.47	55	54	14
1.000 turkeys/day	103	2.35	276	269	70

## Operational Results Aerobic vs. W2E

Production	Normal Aerobic WWTP	Fluence W2E	Notes
	<b>Operational Costs*</b> (in Dollar/m <sup>3</sup> )	<b>Savings with Fluence</b> (in Dollar/m <sup>3</sup> )	
<b>Energy</b>	-0.13	+0.39	Production of energy over consumption
<b>Disposal</b>	-0.27	+0.18	70% reduction in sludge disposal
<b>Chemical</b>	-0.30	+0.07	Less chemical consumption in sludge dewatering
<b>Maintenance</b>	-0.05	-0.10	Waste-to-Energy costs factored in
<b>TOTAL</b>	-1.00	+0.54	Considering 1000 m <sup>3</sup> /day of effluent

# Fluence Circular Effect



## Our Products

- A-FLOAT (floatation unit)
- T-ARC (anaerobic digester)
- NITROSTEP (nitro denitro system)
- NITROSAX (nitrosation)
- THIO-PURE (desulfurization)
- PHOS-PURE (dephosphating)

## Benefits

- Up to 97% of nitrogen reduction in the treated water
- Up to 98% of phosphorus reduction in the treated water
- On-site biogas production from renewable sources
- Get value from waste materials
- 70% reduction in sludge production costs
- Production of a final by-product with favorable agronomic properties (according to local law)
- Reduced carbon footprint through gas production and electricity savings
- Possibility of wastewater reuse (according to local law)
- Extended plant lifespan (more than 20 years)

# Empowering a Sustainable Future



## Engineering

- Integrated project to develop successful solution
- 3D models
- Project management
- Renew of existing plant



## Laboratory

- Sampling
- Chemical Analysis
- Anaerobic Pilot test (granular sludge reactor and CSTR)
- Aerobic Pilot test



## After Sales & Services

- Process audit
- Technical assistance and remote support
- Maintenance for electro-mechanical equipment
- Supply of spare parts and consumables

## Contact Us:

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## About Fluence

Fluence is a leader in the wastewater treatment and reuse, high-strength wastewater treatment, wastewater-to-energy, industrial and drinking water markets, offering custom solutions as well as pre-engineered solutions including Aspiral™, NIROBOX™, SUBRE and Nitro.



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