

High Efficiency Filtering Systems

Building the first MOF manufacturing plant in Latin America to deliver affordable, high-selectivity filtration systems for the most challenging industrial contaminants.

The Problem

Mining and oil operations generate vast volumes of highly contaminated wastewater, where regulatory pressure is rising but treatment remains prohibitively expensive.



In Shale Oil industry alone:

- > 20+ million m³/year of complex wastewater over 8,000 Olympic pools.
- > Treatment is costly and ineffective, often >USD 1M per fracturing cycle.
- > Valuable resources remain unrecovered (Lithium, REE, Uranium).

Our Solution

High-selectivity MOF cartridges for modular treatment plants:

- Ultra-selectivity: removing up to 60% more than current technologies.
- Lower OPEX: regenerable cartridges that reduce logistics costs by up to 40%.
- Modular & plug-and-play: fits directly into modular units or existing treatment systems.
- Circular use: swappable cartridges enable material recovery of valuable materials,



Technology Validation

- TRL 3 achieved: high-efficiency production >95%
- **Pilot scale underway:** modular production planned for 2026.
- **Proven performance:** MOF adsorption capacity proven for 20+ key contaminants.

Business Model

- Cartridge sales + regeneration (recurring).
- Usage-based licensing per m³ treated.
- Performance contracts with contaminant-specific cartridges.

Market Opportunity



Initial target: Flowback treatment in Vaca Muerta (~1,400 wells)



Future markets: lithium mining, industrial leachates, agriculture



SAM: USD 4.1 Billion (flowback in Argentina by 2032)



Revenue Goal: USD 33M/year in 5 years

Current Status

- MOFs ready for sale
- Operational lab & synthesis facility
- IP Protected
- Currently raising \$300K seed round for reactor + pilot deployment

The Team



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