
TextInOL® by
InnoChem®
Innovative approaches to textile waste valorization
Revolutionary technology for the chemical recycling of mixed textile waste
www.textinol.com

# Textile waste

## Problem:

Textile waste recycling rate UE: **<19%**

6.95 million tons generated annually

# Current State

**regulation UE**

From 2025, mandatory separate collection of textiles.

Ban on the incineration of recyclable materials..

**Actual disposal costs**

€200–350 per ton for energy recovery via termovalorisation

Only pure materials are recyclable, but 60% of cotton is still incinerated.

# Italian Market

## 1 M

Italian textile waste ton / year

### Growing demand

Growing consumption of apparel

New more strict regulation

### Existing technologies are inadequate

Mechanical recycling is limited to homogeneus materials

Chemical recycling only for single fibers

**No solution for complex mixed fabrics**

# TextInOL ® solution

Chemical recycling of mixed textile materials without harsh pre-treatments for the production of high-value building blocks and biofuels

Mixed materials

Thermal and electric energy production

Renewable chemicals in-situ

**Patent pending**

# USPs TextInOL

- **Mixed textiles (cotton, PET, elastane, viscose, wool)**
- No harsh mechanical pre-treatment
- Full integration into existing supply chains

| | |
|---|---|
| **500 €** | **Revenue per ton of treated waste** |
| **>70%+** | **Process yield** |

# What We Offer

## Technology licenses

Sale of patented know-how and usage licenses with a fee + royalty model for technology implementation

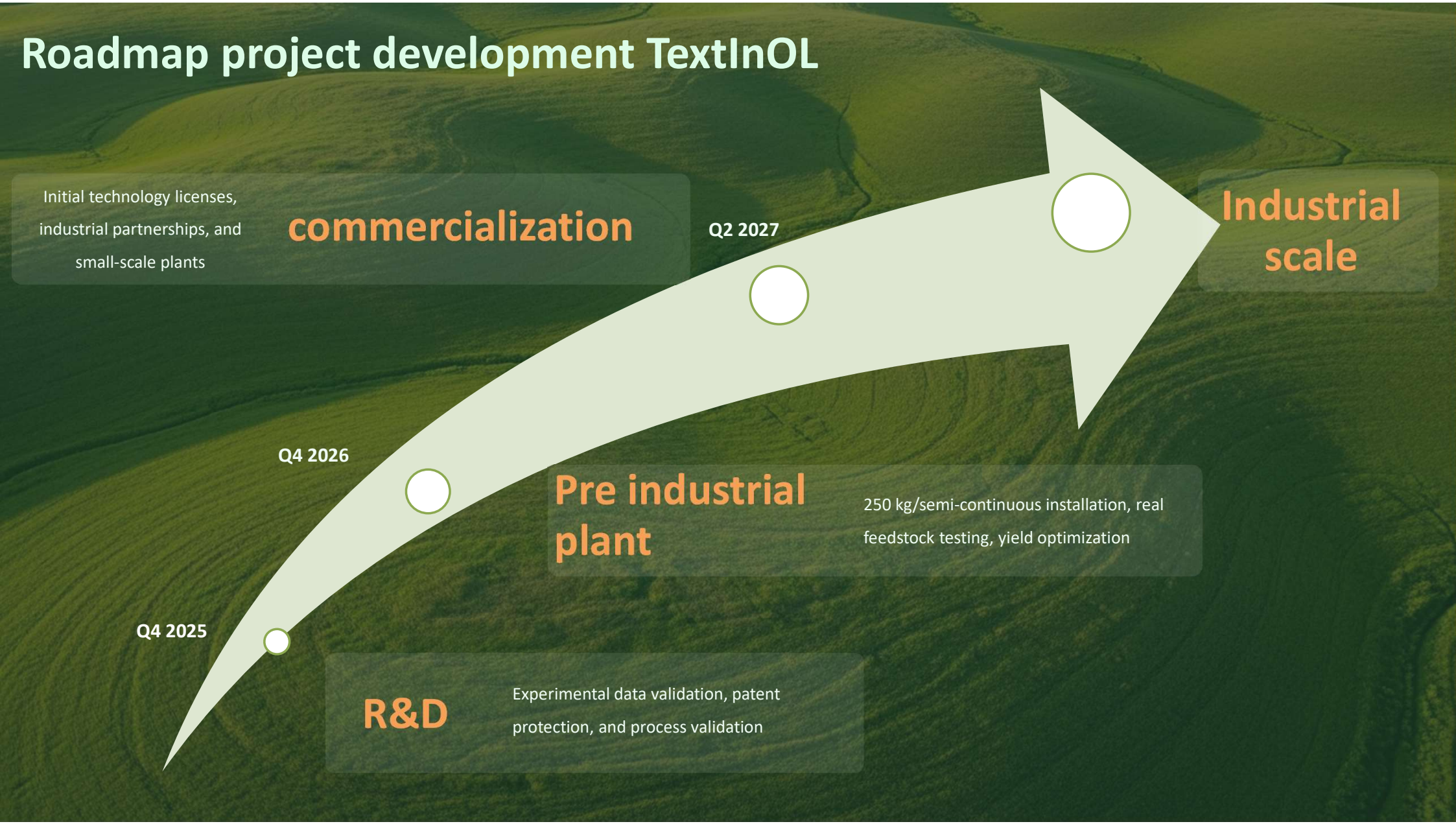
## Plant and products

Turnkey plant supply from 1 to 20 tons/day with customizable capacity and output type

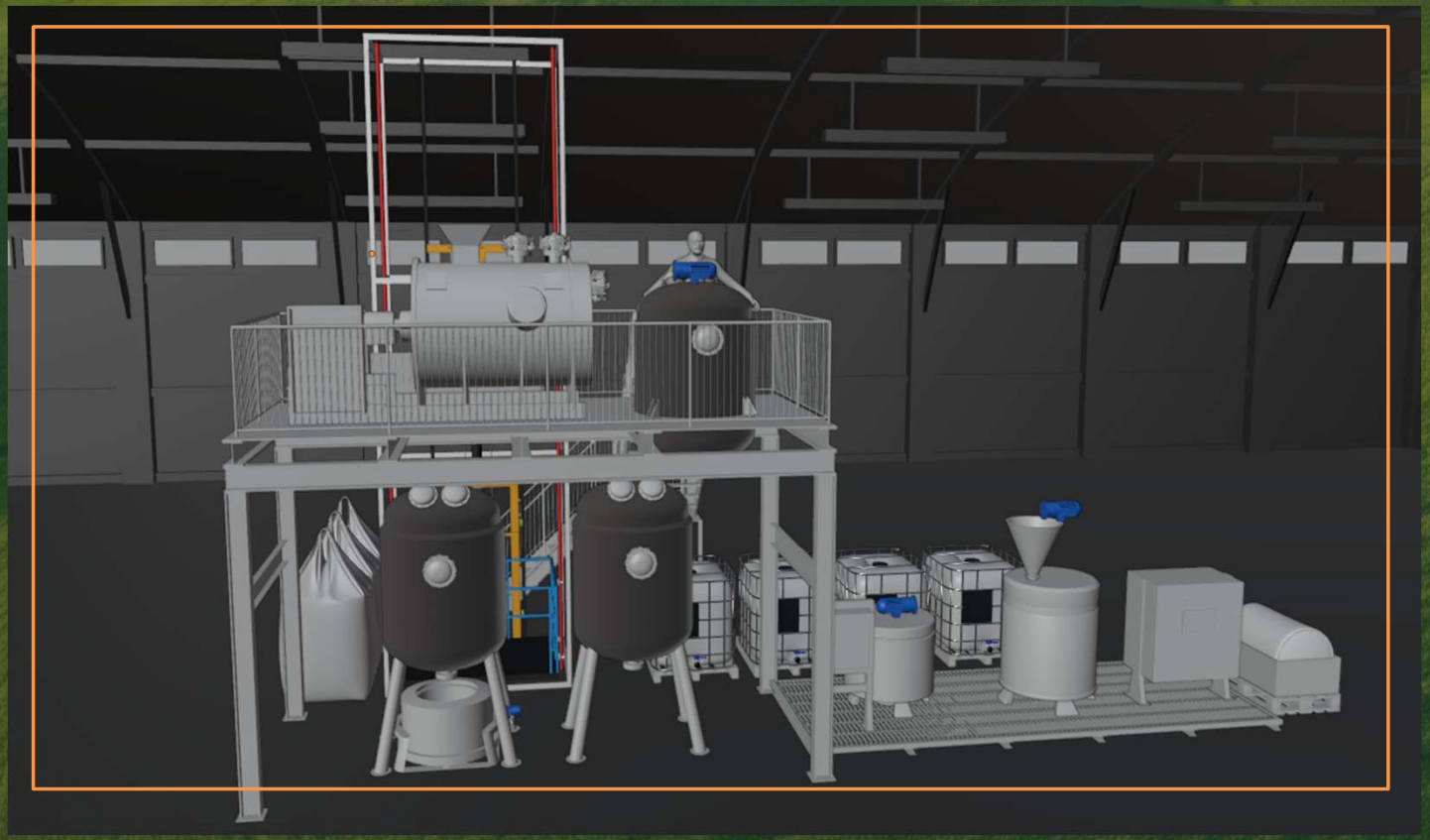
## Services

Support for industrialization, plant management and maintenance, and specialized process consulting

# Roadmap project development TextInOL

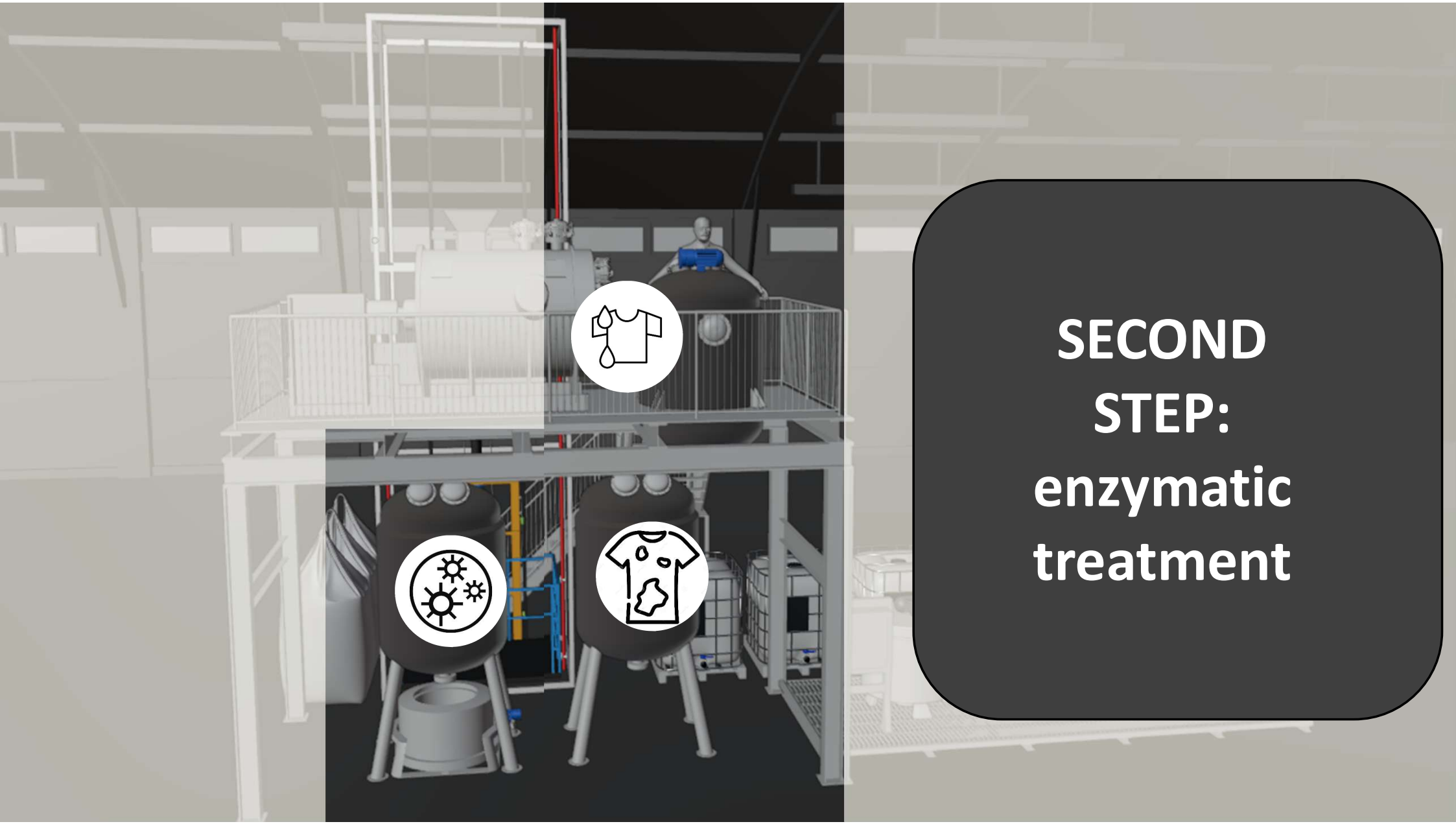


# PLANT Rendering



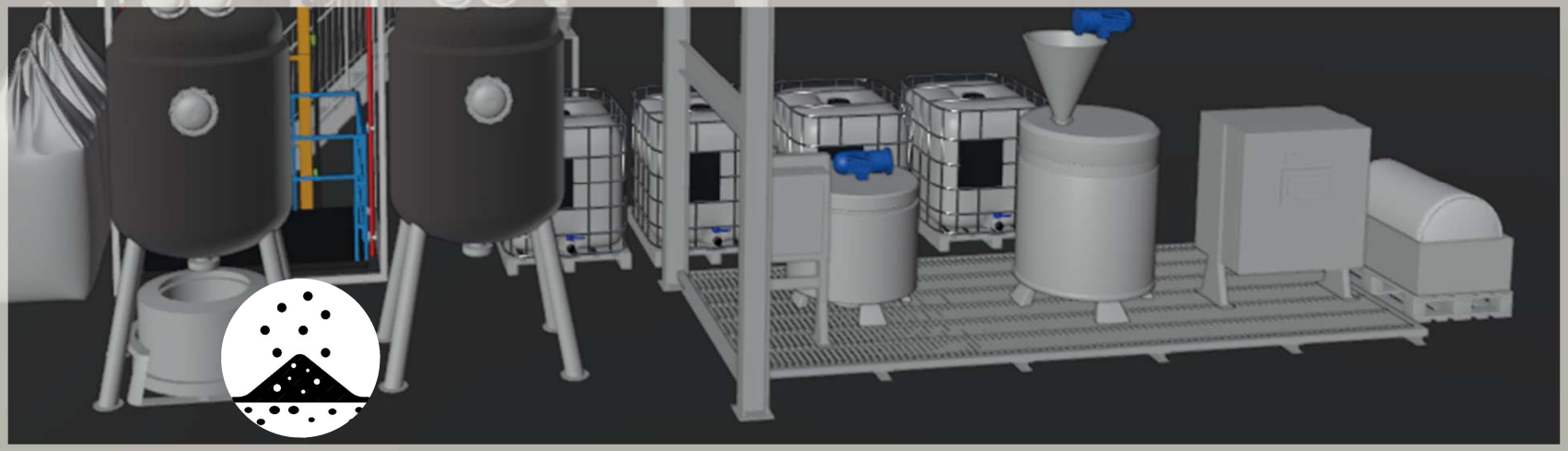
- SEMICONTINUOUS
- 250 kg/day
- AVAILABLE FROM DECEMBER 2026

**FIRST STEP:**
**chemical pretreatment**



**SECOND STEP: enzymatic treatment**

# THIRD PHASE:
# biofuel production via anaerobic digestion



# INNOCHEM : What is waste to you is a treasure to us

Technologies for reducing, recovering, and recycling polymer, textile, solvent, and water materials.

## Modular and scalable plants

## Custom analysis and optimization

## Sustainable excellence approach

INNOCHEM

# www.innochem.it

**Together towards a sustainable future**

Member Of LE2C LOMBARDY ENERGY CLEANTECH CLUSTER

po.in.tex Polo Innovazione Tessile


| Where | Email | Telephone |
| --- | --- | --- |
| Legnano MI - Italy | info@innochem.it | +39 3492204698 |