Teaser

Spring 2025

B-Plas

INVESTMENT OPPORTUNITY: B-Plas → Turning Waste into Value

Next-Gen Modular Plants for Sludge Upcycling

B-Plas

🧬 Company Overview

B-Plas sbrl is a benefit corporation born from a university spin-off (University of Bologna), incorporated in Feb. 2021 and majority-owned by **Diemme Filtration Srl**. We design **modular, customizable systems** that convert wastewater sludge into high-value bioresources: **PHA bioplastics, biochar, biogas and nutrients**.

B-Plas is a pioneering start-up focused on creating sustainable solutions through the development of cutting-edge biotechnology. The company specializes in **reducing** and **converting sewage sludge** - a challenging and abundant waste stream - into **polyhydroxyalkanoates (PHAs)**, a family of high-performance, fully biodegradable bioplastics.

The core of B-Plas' innovation lies in its circular economy approach: transforming what is typically considered a costly and environmentally **burdensome material into a valuable resource**.

This aligns perfectly with global sustainability goals and the European Green Deal, making the technology especially relevant in today's push for greener industrial practices. By integrating microbiology, chemical engineering, and environmental science, **B-Plas offers municipalities and industries a dual benefit** - **significantly reducing the volume and impact of sludge while producing sustainable materials with commercial value**. The resulting PHAs can be used in a wide range of applications, from packaging to agriculture and medical products.

With **strong relationships in both academia and industry**, B-Plas is rapidly positioning itself as a key player in the bioeconomy. The company is committed to reshaping waste management and material production through innovation, environmental responsibility, and long-term economic viability.

⚙️ Technology

Up to 80% sludge mass reduction
→ cost reduction of sludge disposal for our customers.

Modular systems tailored to customers needs:
- ✓ **Sludge reduction** (B-Sludge)
- ✓ **Biogas production** via anaerobic digestion (B-Energy)
- ✓ **PHA-rich biomass** for bioplastics (B-Poly)
- ✓ **Phosphorus recovery** (B-Fosfor)

🌎 Market & Positioning

EU sludge disposal market: €1.6B (2025)

B-Plas positioned as a **tech leader**
(HTC + PHA integrated)

Strategic projects with **Gruppo CAP, Herambiente, Gruppo AqA**

Co-leader of EU-funded **CROSS-LIFE Project**
(LIFE-21-ENV-IT-CROSS-LIFE - Project n.101074164)

📈 Investment Opportunity

Seeking **€ 4m for industrial scale-up**

Break-even forecast: **2027-28**

Estimated **2030**
≃ € 35m revenues
≃ 20-25 % EBITDA margin

EXIT flexibility

SNAPSHOT

7x Headcount

2x Patents granted
1x Patent pending

1x full-scale B-Plas plant Sold
To a wastewater treatment plant

2x full-scale DEMO plant by 2025-26
Within EU-funded Project **CROSS-LIFE**

INVESTMENT OPPORTUNITY: **B-Plas → Turning Waste into Value**

Next-Gen Modular Plants for Sludge Upcycling

B-Plas

Seeking: **€4.0M** for industrial scale-up

CONTACTS

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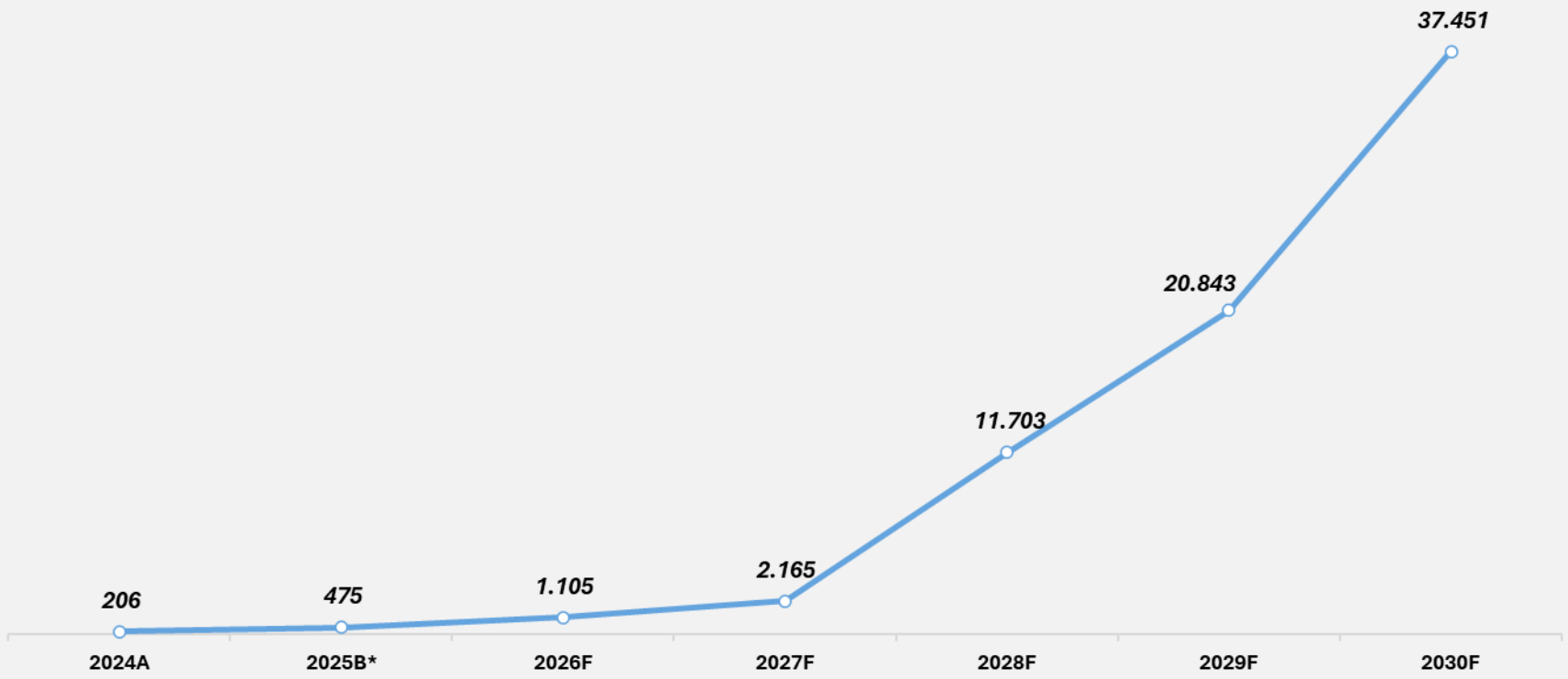
BoD member
carlo.solaroli@diemmefiltration.com

REVENUES

in € K



**Budgeted revenues 2025 already in backlog*

Pitch Deck

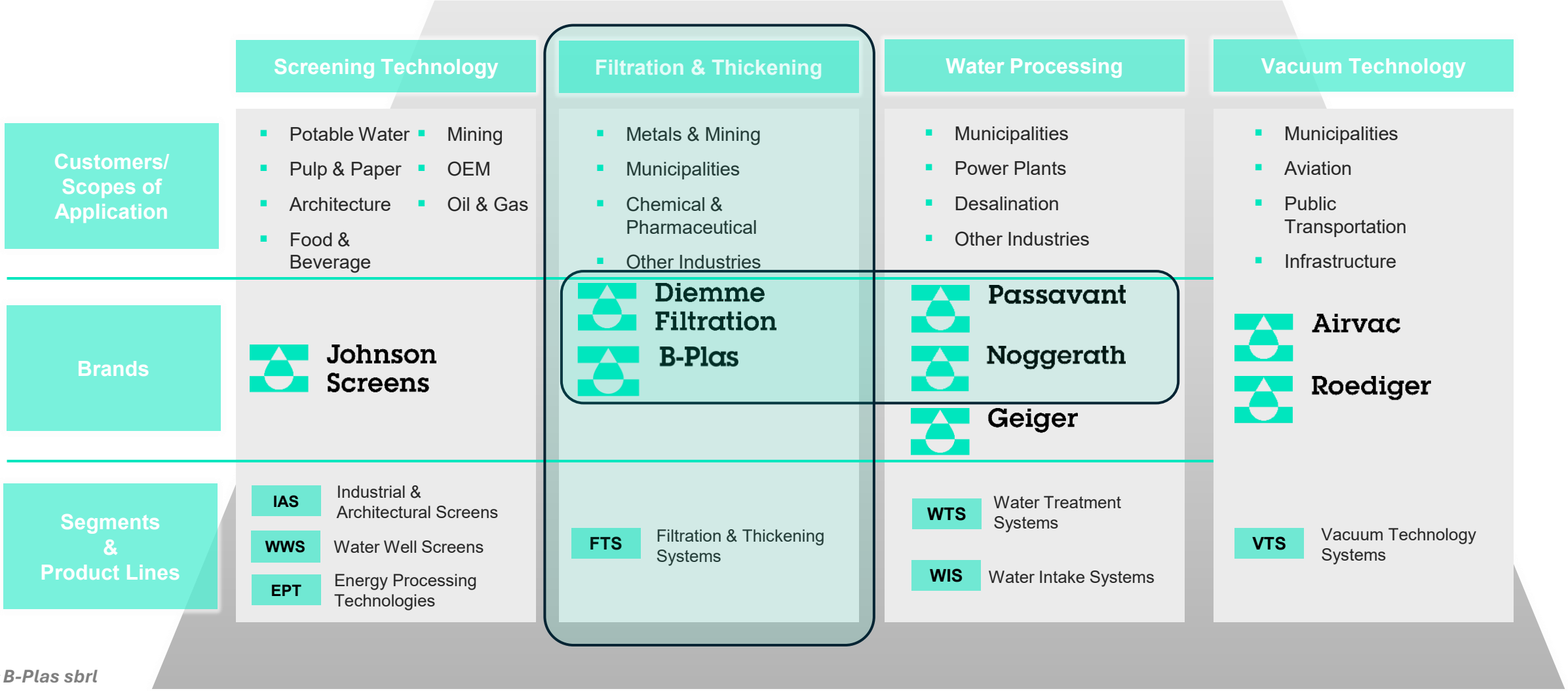
B-Plas

Presented by Davide Collini

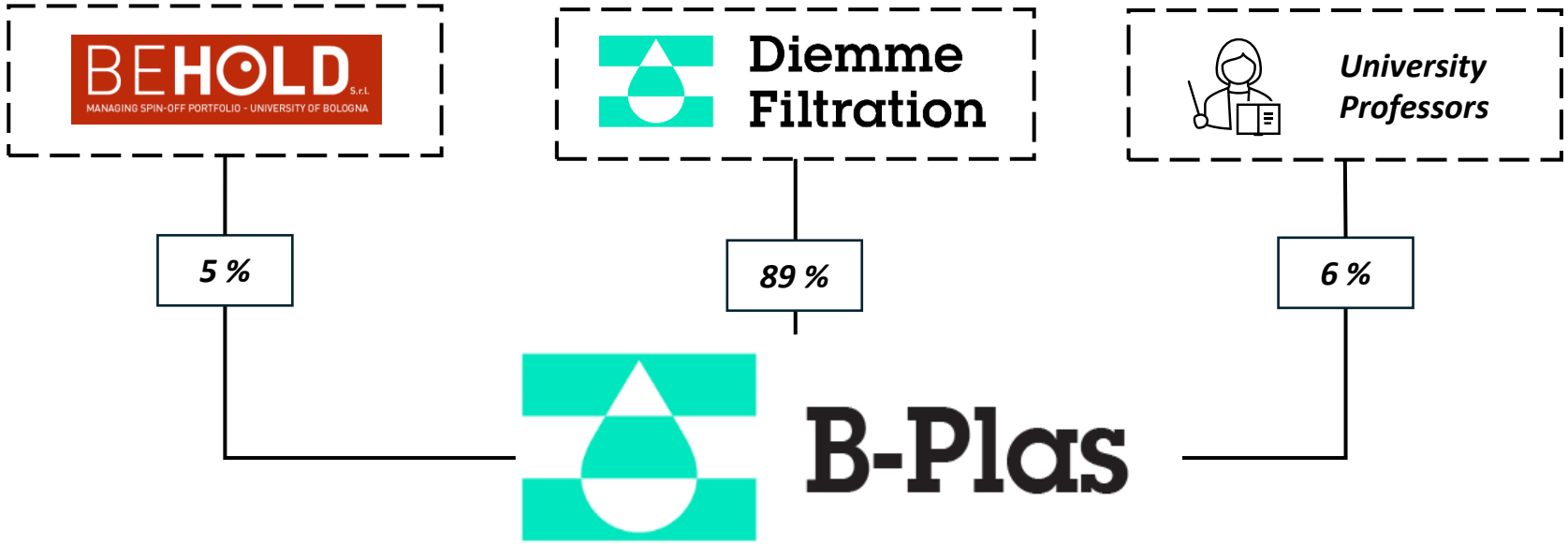
B-PLAS AT A GLANCE

B-Plas

Aqseptence Group, Global overview



Shareholders



BoD members

PURPOSE

We want to help society and anthropogenic ecosystems to be sustainable and circular

VISION

New value to wastewaters and sludges in a circular perspective

OUR TEAM

Davide Collini, PhD

Founder, CEO

Eleonora Torricelli

Sales & Marketing

Ivan Prigioniero

Sales Director

Cristian Torri, Prof

Founder, R&D Advisor

Mauro Spagnoli

Project Manager

Andrea Bassi

CTO

Daniele Pirini

Industrial Chemist

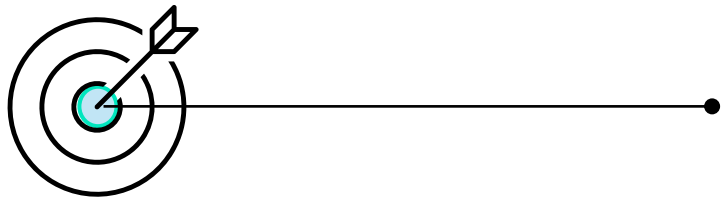
Alisar Kiwan, PhD

Process Biologist

Vittoria Stefanelli, PhD

Environmental Scientist

B-Plas offers **a viable and sustainable solution to the problem of sludge disposal** of municipal, industrial or agro-industrial treatment plants



MISSION

Through open relationships with customers and field trials,
*we design **customized processes***
*and implement **modular systems***
*for the treatment and **upcycling of waste sludges***
*into new **by-products and bioresources***

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In Italy a volume of ≈ **3,5 Mt/y** of dehydrated sewage sludge is produced

Source: REF Ricerche, based on ISPRA data

Agricultural use		Composting		Waste to Energy		Landfill
						
€/t 50 – 120	>	**€/t 80 – 130**	>	**€/t 150 – 250**	>>	**€/t 180 – 300**

Source: Company data

- **increase in treatment demand**
- **restrictions in disposal availability**

Make the sludge management a **critical cost** for operators!

Payback period < 5 years
Sludge disposal cost > 70-80 €/t

$TAM_{(Italy)} \approx 80\%$

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Fossil based plastics global production ~ 400 Mton/y

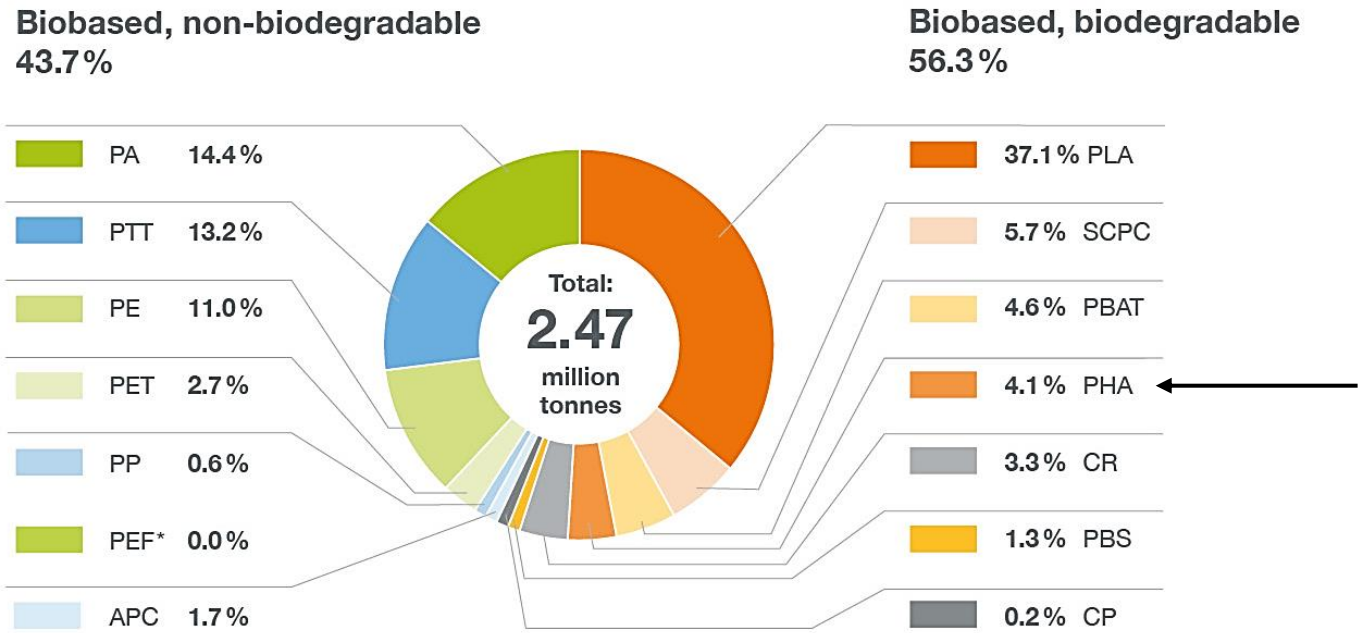
1 ÷ 2 k€/ton

Bio-plastics global production ~ 2.5 Mton/y

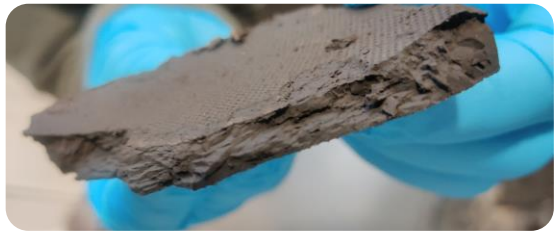
PLA ≈ 3 k€/ton
PHA ≈ 4 k€/ton

Source: European Bioplastic, Nova-Institute

Global production capacities of bioplastics 2024

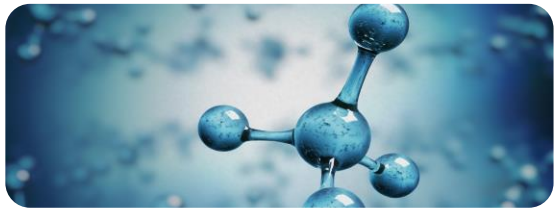


EXPECTED GROWTH : 3-5% YoY



B-Sludge
sludge module

- Up to 80% sludge reduction
- Sanitized water recovery



B-Energy
sludge module + biogas

- Up to 80% sludge reduction
- Biogas production

B-Poly
sludge module + PHA*

- Up to 80% sludge reduction
- PHA rich biomass production

B-Fosfor
Phosphorus Recovery

- Up to 95% phosphorus reduction in wastewater
- Phosphorus recovery

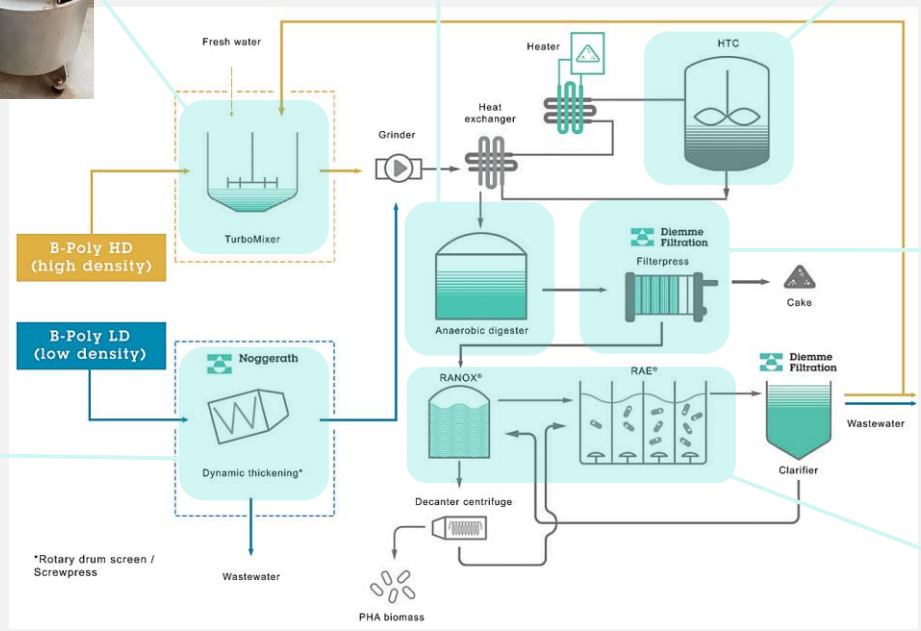
** Polyhydroxyalkanoate*

B-Plas

1. **Feasibility assessment**

2. Lab & Engineering study

3. EPCC



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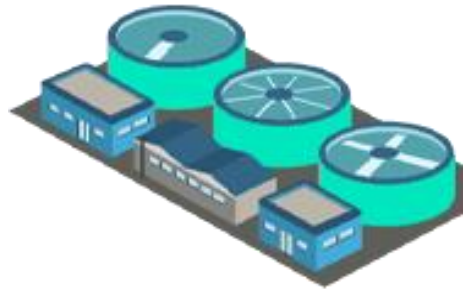
Original Equipment Manufacturer

Purchase Plant

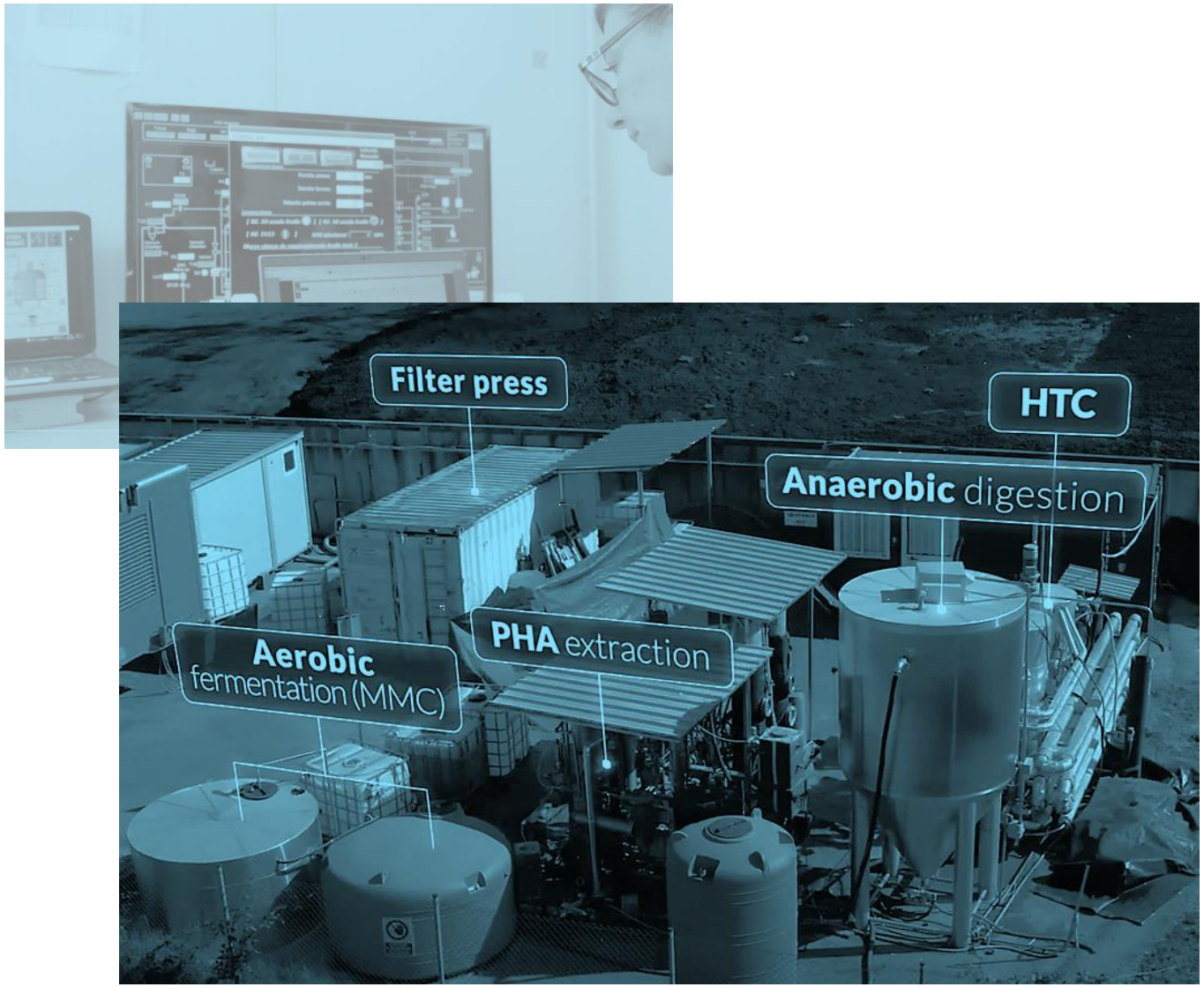


Company
Plant management

Customer's benefits :

- **New Revenues**
  - **PHA rich biomass**
    - **B2B Market**
- **New Value**
  - **Biogas**
  - **Biochar**
- **Savings**
  - **Up to 80% sludge reduction**

PROTOTYPE PLANT



- **Sector**: Agroindustrial
- **Application**: Anaerobic sludge
- **Capacity**: 1.000 ton/y (input)
- **Dehydrated Cake**: 75 ton/y
- **PHA production**: 1,5 ton/y
- **Operations**: 24/7
- **Operating period**: 2019-2022
- **Location:** Emilia-Romagna (Italy)

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Gruppo CAP spa

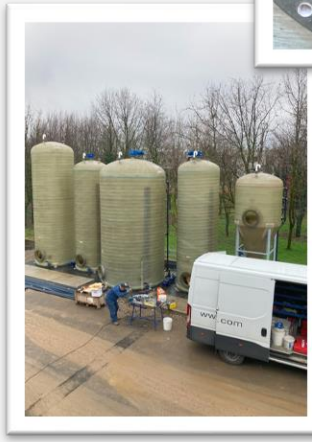
B-Poly Plant

(2.000 ton/y)

PHA-enriched biomass
production plant
from VFA-rich flow
in Sesto San Giovanni (MI)

Engineering
and supply of the plant

1a



LATEST UPDATE !
plant under commissioning

Gruppo CAP spa

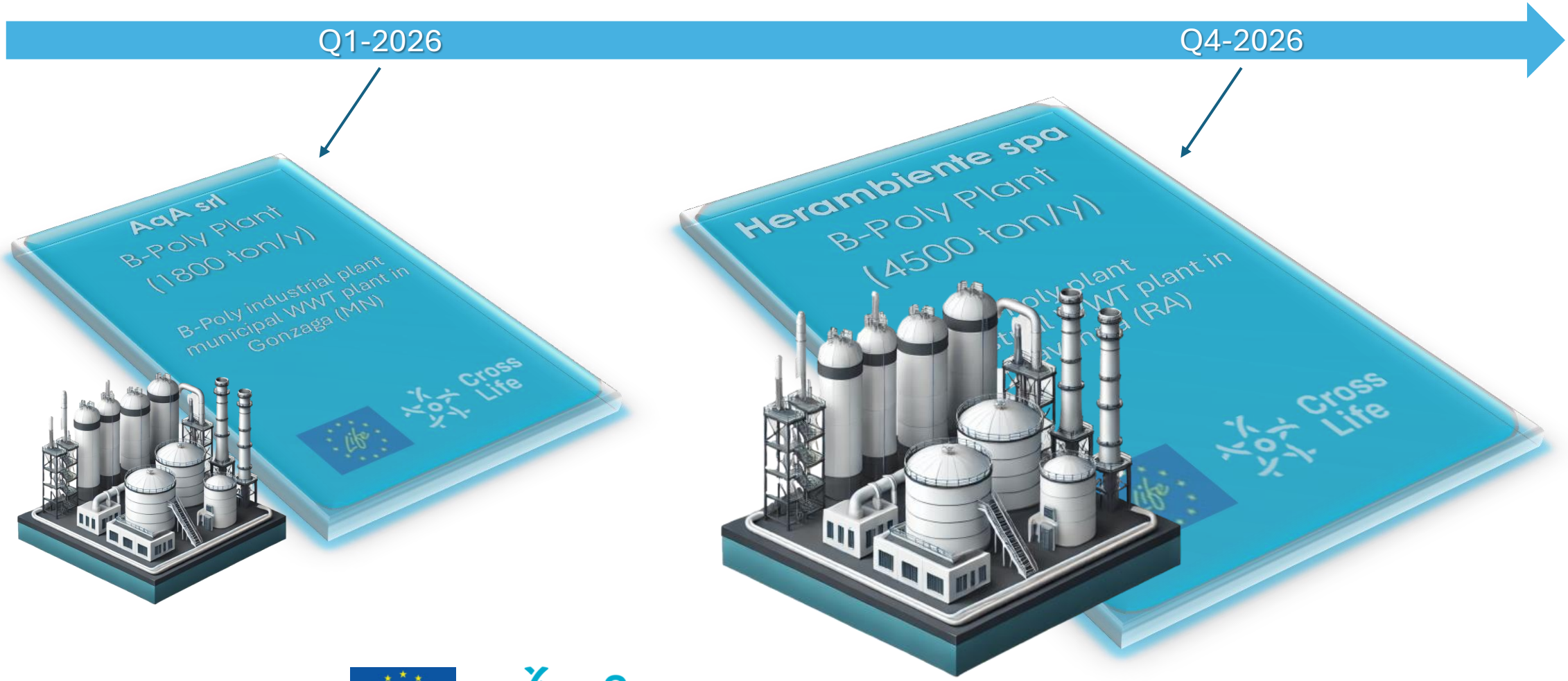
B-Fosfor Plant

(2.000 ton/y)

Phosphorus
precipitation and recovery
production plant
in Sesto San Giovanni (MI)

Engineering
and supply of the plant

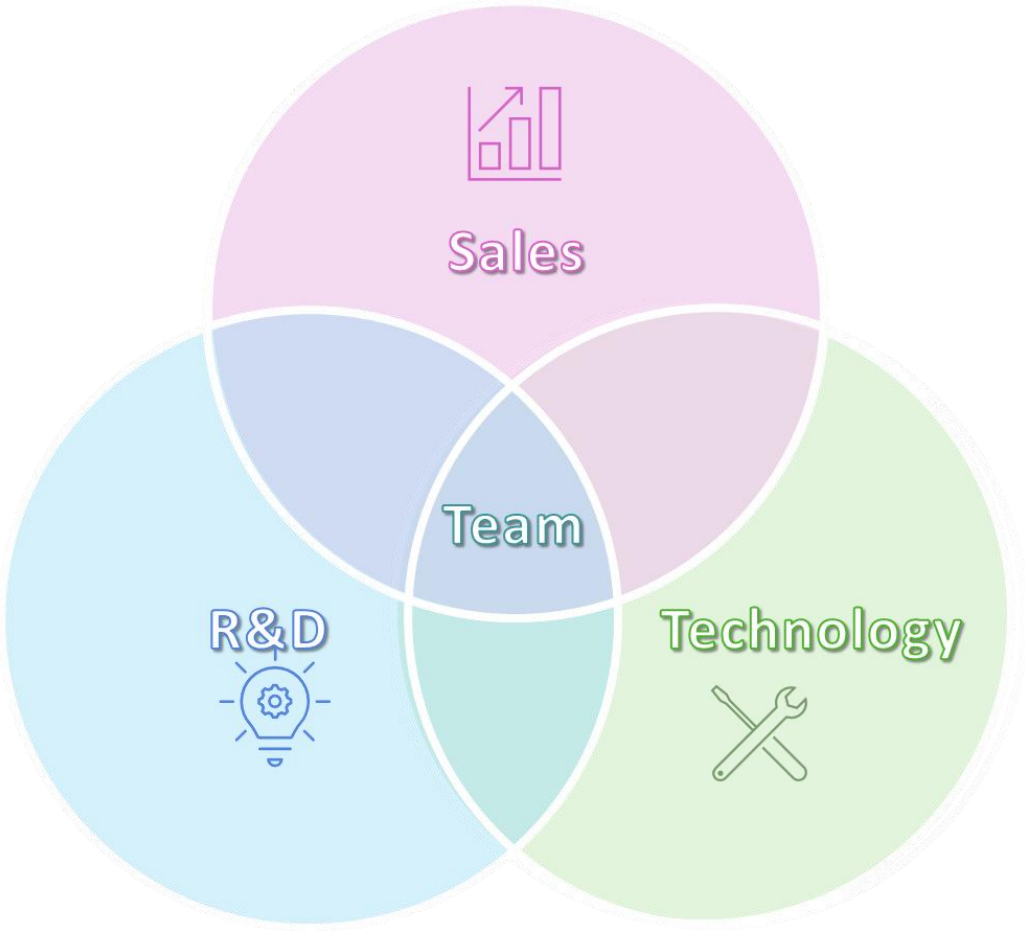
1b



GROWTH STRATEGY - " WHAT DO WE NEED TO GET WHAT WE WANT "

B-Plas

Market Penetration
Internationalization



Fund Raising for Growth

IP

Industrial scale-up

“Let's empower green growth together”