FertiCovery

Market & replication potential

Online workshop

13/04/2026

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Agenda

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Introduction and overview of FertiCovery

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Overview of work package 5

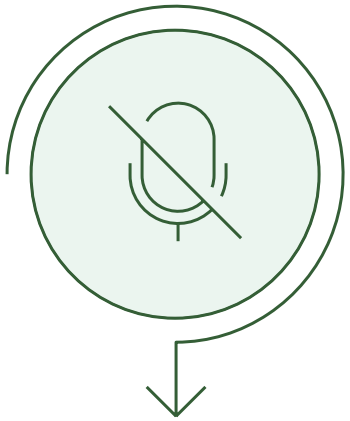
03

Preliminary insights on the potential for scaling up the production of fertilising products

04

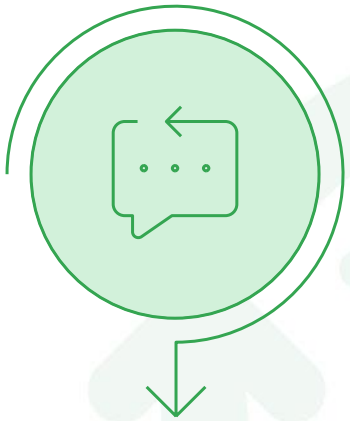
Preliminary insights on the regulatory framework

Housekeeping rules



Mute microphones

Turn off your microphone to avoid interferences. This will help keep the session clean.

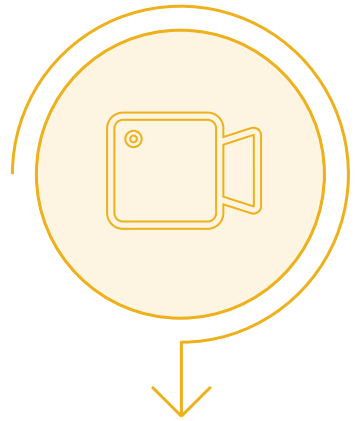


Use chat

Use the chat to ask questions. The speaker will address them when possible or in the Q&A.

Raise your hand to speak

If you would like to speak, please use the “Raise Hand” function.



Camera and Recording notice

Please note that this session is being recorded. If you turn on your camera, you consent to being recorded and published on YouTube.

Benefits of participation

Learn about technologies

Discover promising technologies for nutrient recovery and bio-based fertilisers

Evaluate methodology

Evaluate our methodology with us

Connect with experts

Connect with experts and peers in the field

Shape case studies

Have a voice in shaping our case studies through interactive sessions

FertiCovery

01

Update of FertiCovery

Sterre van der Voort, BTG Biomass Technology Group B.V.

About

Horizon Europe project

January 2025 to December 2027

Coordination by

BTG Biomass Technology Group BV (NL)

with **8 partners across 7 countries**

Aim

FertiCovery aims to **remove barriers** and **promote nutrient recovery and bio-based fertilisers** from secondary raw materials such as biowaste, manure, and wastewater.

The project

FertiCovery has created a **longlist of >75 case studies** highlighting existing installations that transform secondary raw materials into alternative fertilising products across Europe and globally.

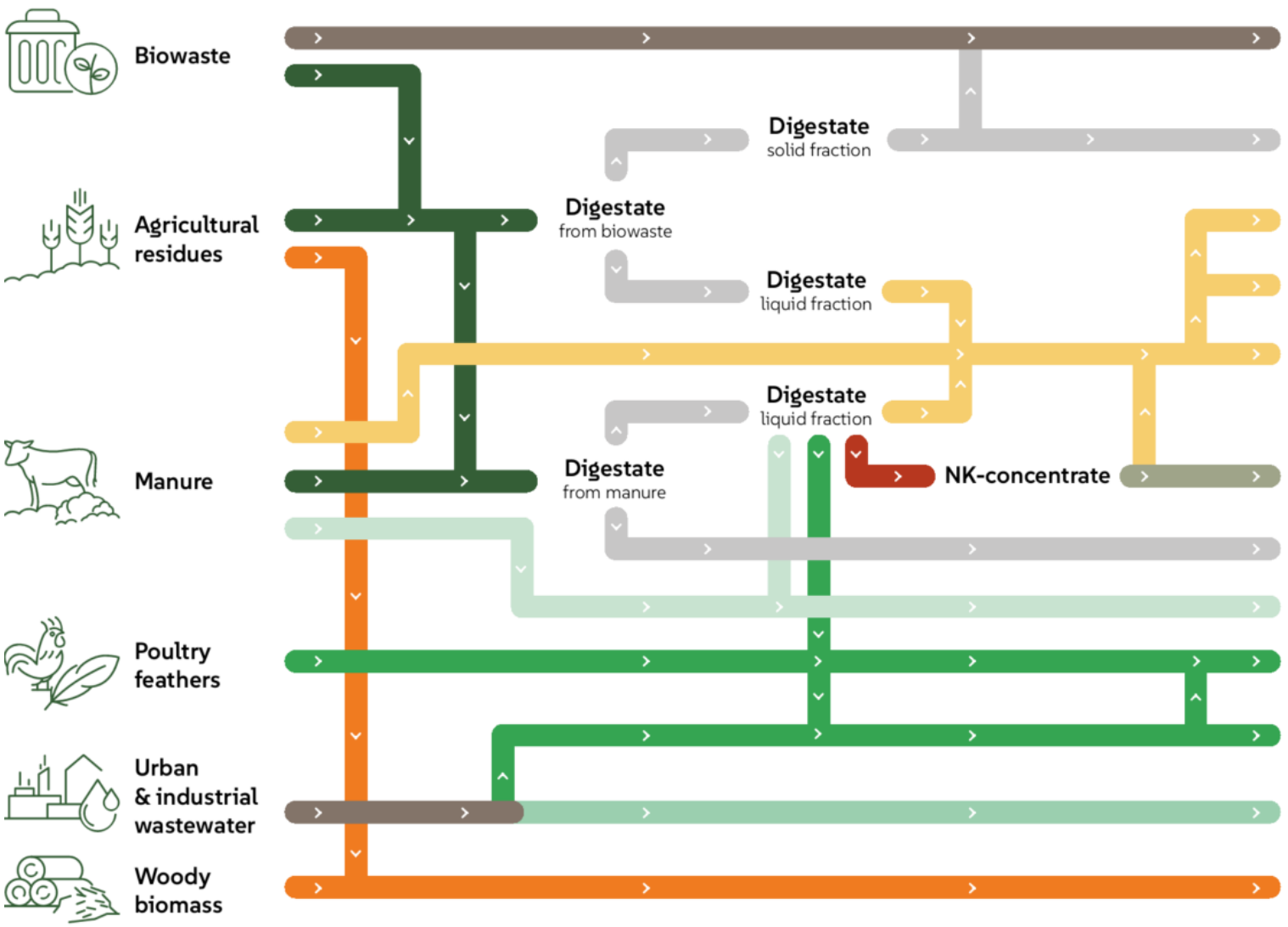
The project will provide a comprehensive **analysis of 25 nutrient recovery and bio-based fertiliser case studies**, detailing their feedstocks, value chains, products, and applications.

FertiCovery will develop **a multicriteria decision analysis report** and **datasheets showcasing the 10-15 most effective technologies.**

Active engagement with European and international stakeholders is implemented through **5 workshops and 6 open forum events**, fostering collaboration across the entire supply chain.

Selected 25 case studies

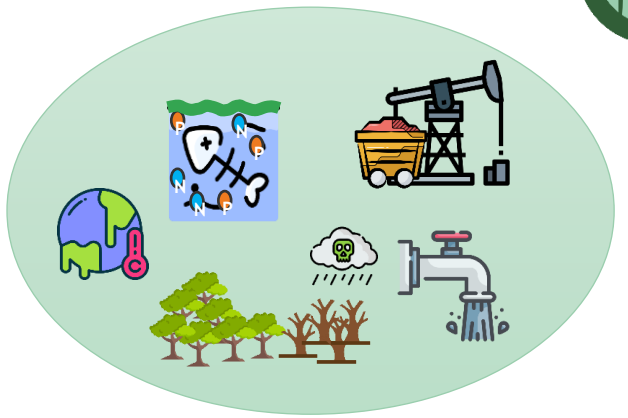
Short descriptions of the 25 case studies will be available on the website end of April 2026



- Composting
- Anaerobic digestion
- Stripping and scrubbing
- Membranes
- Evaporation
- Plasma
- Hydrolysis
- Treatment
- Precipitation
- Pyrolysis

Analysis of 25 case studies

- Technical assessment
- Environmental assessment
- Product Evaluation
- Market and Replication Potential
- Social Risks
- Feedstock analysis



Germination Tests (OECD 208)
Phytotoxicity on Maize & Wheat. — 14 Days

Leaching Analysis
Nutrient release in water environments. — 24 Hours + Modelling

Pot Tests
Long-term growth analysis. — 5 MONTHS

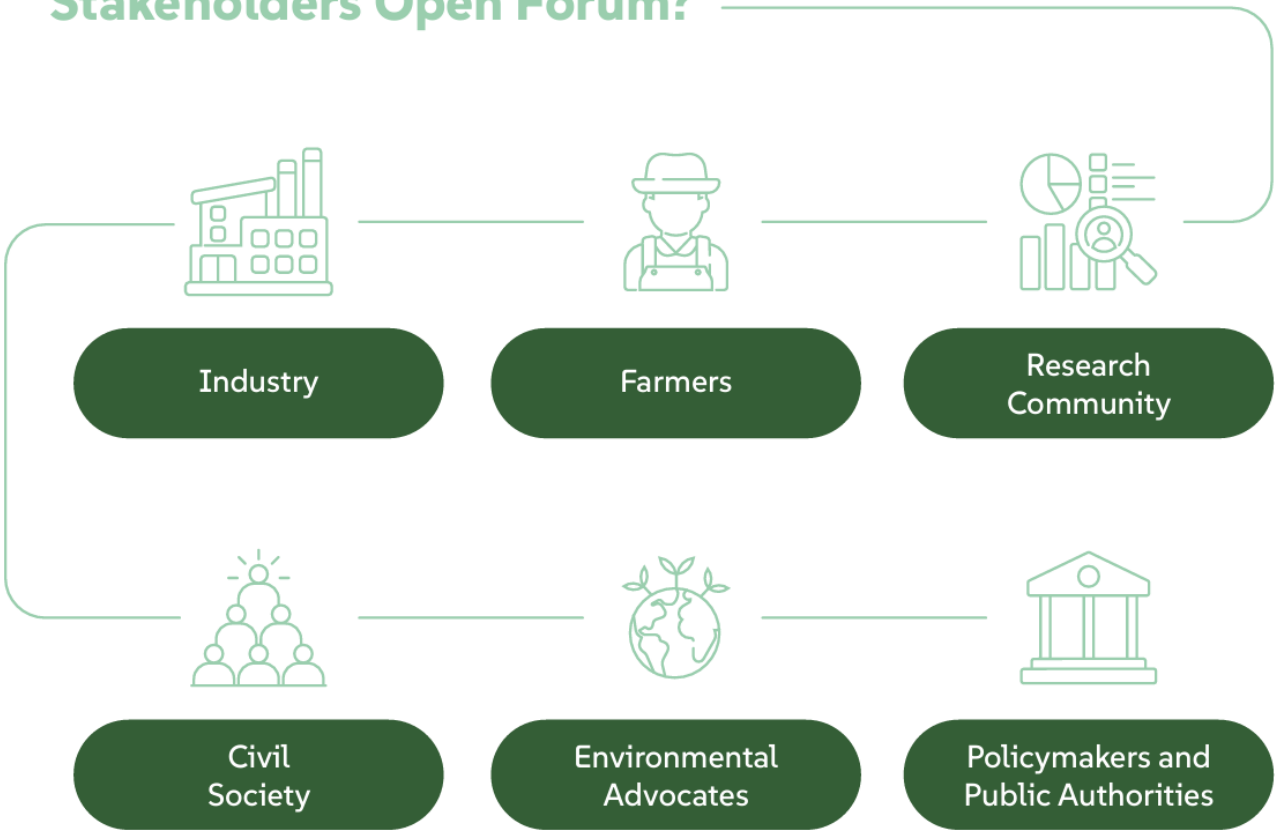
Critical Constraint: Biological growth cycles are fixed and cannot be accelerated.

Join our Open Forum of Stakeholders

The Open Forum focusing on “**bio-based fertiliser production and application**” allows for **discussions** and **validation** of the FertiCovery results and insights

Forum of Stakeholders

Who can join the Stakeholders Open Forum?



Upcoming workshops

#1 Overview and selection of value chains
9 September 2025

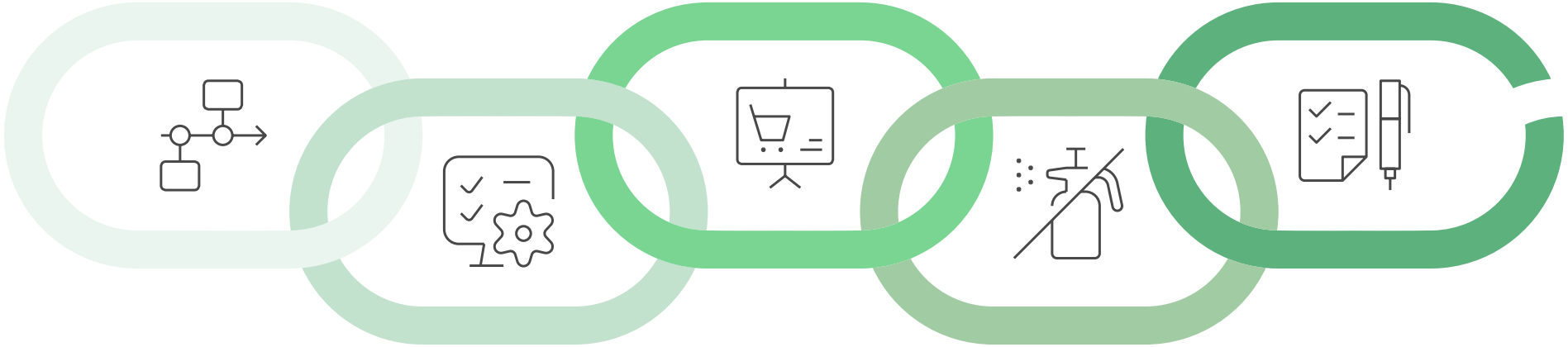
Presents the selected value chains.

#3 Market replication potential
Today

Assesses market opportunities and replication strategies.

#5 Synthesis of results
Aug.-Nov. 2026

Integrates results to determine the best available technologies.



#2 Technologies: state of play
19 February 2026

Discuss the state of play of the technologies.

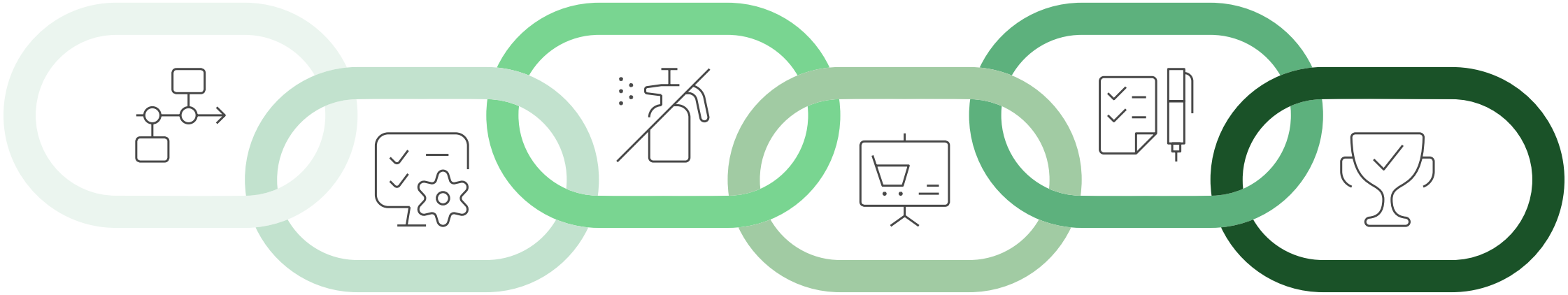
#4 Fertiliser products: impact and use
July-Oct. 2026

Examines the effects and usage of fertiliser products.

Upcoming events

13th International Conference on Sustainable Solid Waste Management
Kos, Greece
Organised by our partner NTUA

#1 Overview and selection of value chains
24 June 2026, Kos



#2 Technologies: state of play
Oct. – Dec. 2026

#4 Market replication potential
June 2027 – Aug. 2027

#5 Synthesis of results
…ne 2027 – Aug. 2027

#6 Final event: recommendations
Oct. – Dec. 2027

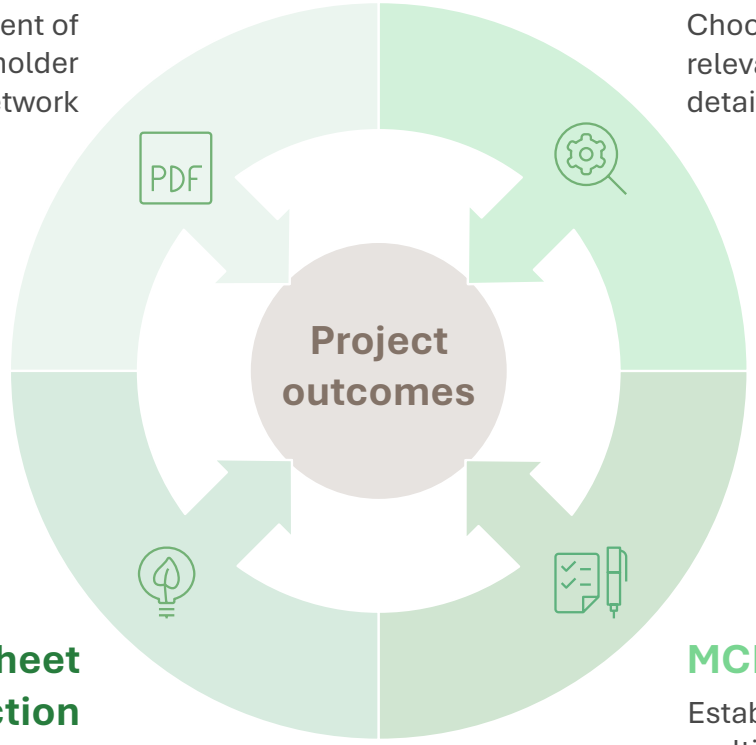
Sister project

Horizon Europe project funded under the same call topic

FERTITEC
INNOVATIVE RECOVERY TECHNIQUES FOR ALTERNATIVE FERTILISERS

Stakeholder engagement
Establishment of stakeholder network

Technology selection
Choosing the most relevant technologies for detailed research



Factsheet production
Creating informative documents in the same template

MCDA criteria
Establishing criteria for multi-criteria decision analysis

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Thank you

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ferticovery.eu

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02

Overview of work package 5

Gabriella Papa, EBA

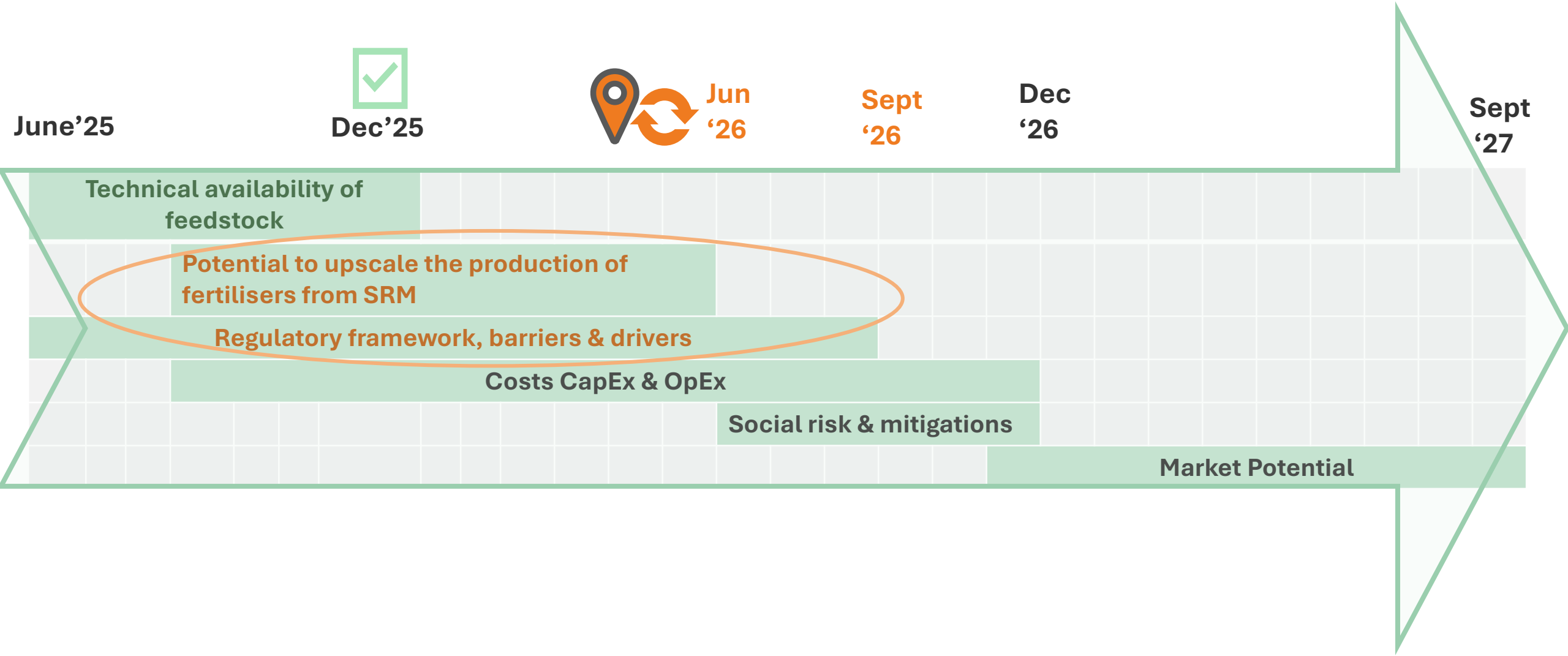
WP5 –Market and replication potential

Objectives

1. ASSESS TECH AVAILABILITY of SRM (urban and industrial waste water, sewage sludge, biowaste, digestate treated manure)
2. IDENTIFY of selected tech and fertiliser products (i) regulatory barriers, (ii) market uptake potential (iii) market value
3. ESTIMATE CAPEX & OPEX of selected tech.
4. PERFORM (i)social risk, (ii) impact identification (iii) formulation mitigation measures

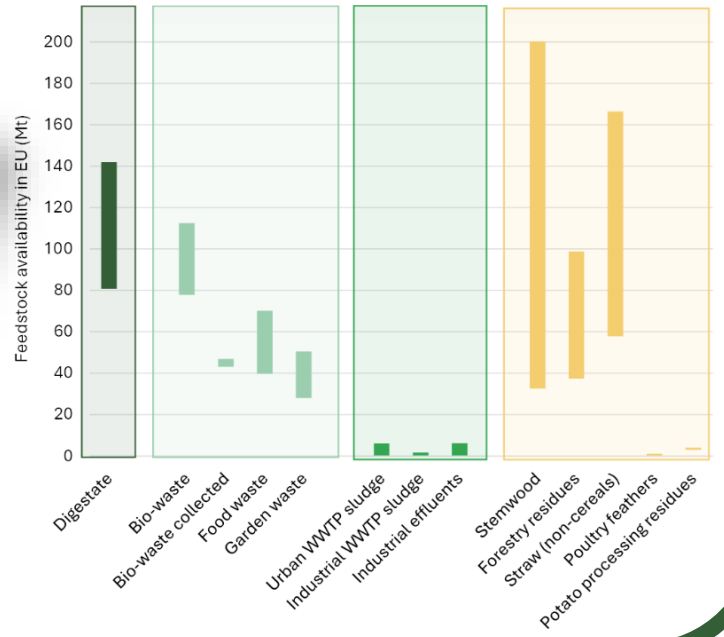
WP5 –Market and replication potential

6 Tasks, 7 Deliverables



Task 5.1 Technical availability of feedstock supply

- Feedstock based on **25 technologies**
- Availability per **feedstock groups** and per **MS**
- Availability based on **generated** and **collected** amount
- Assessment **volumes @ different site levels**



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03

Preliminary insights on the potential for scaling up the production of fertilising products

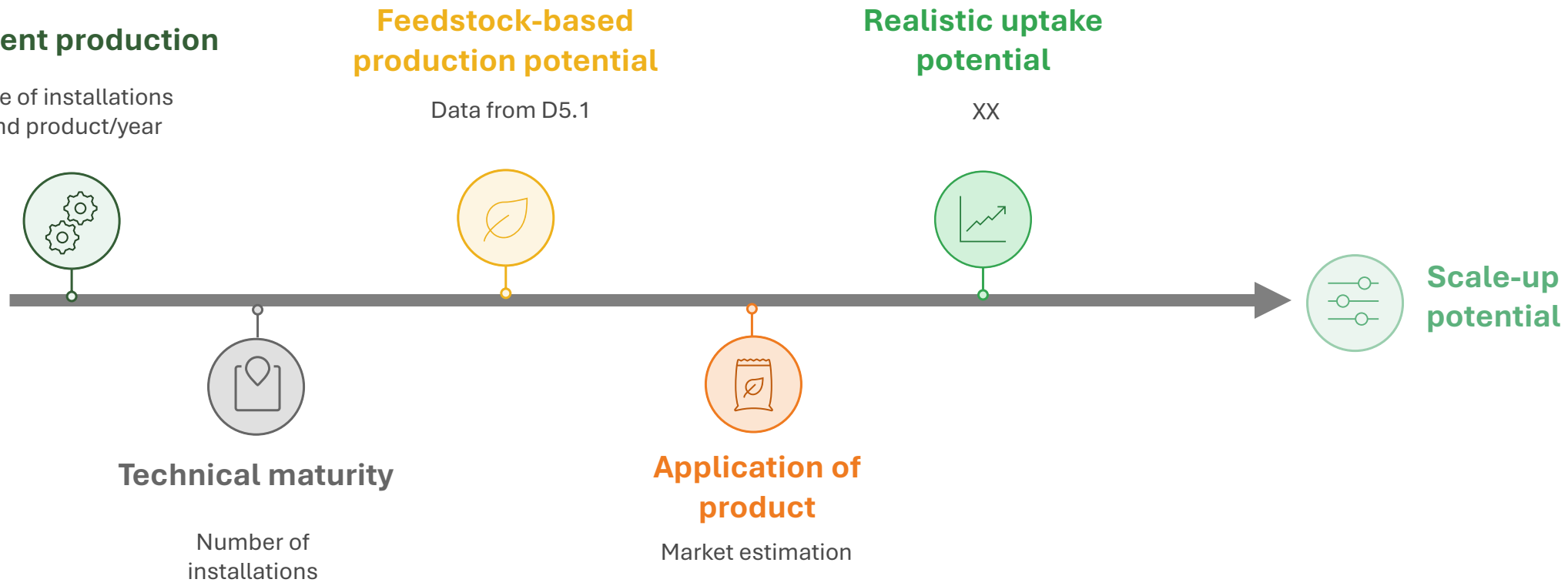
Martijn Vis, BTG Biomass Technology Group B.V.

Main question

- What is the scale up potential of bio-based fertiliser production in the EU27?
- In other words: what would be possible if we would solve all financial, market legal, social and product barriers?
- Depends on:
  - Feedstock availability
  - Technology maturity
  - Market potential.

By June 2026

From data to scale-up potential estimation



Example of struvite

- Feedstock availability
  - Municipal wastewater
  - Potato and dairy industry
- Technology maturity

  >100 struvite recovery plants worldwide

  >39 plants in Europe, mainly in NL, BE, DE.
- Market potential
  - Direct application golf greens etc.
  - As component in NPK fertilisers
  - Raw material in conventional P-fertiliser production

	ktonnes struvite	ktonnes P
A. Feedstock-based potential	**310**	**34.7**
- municipal wastewater	285	31.9
- wastewater potato industry	8.3	0.9
- wastewater dairy industry	16.8	1.9
B. Market potential	**403**	**45**
- Direct application (golf courts, grass, non-agro sector)	47	5.2
- 10% blending with EU conventional P production	321	35.9
- 15% replacement mineral P in organic farming	35	4.0
C. Total potential (minimum of A & B)	**310**	**35**
D. Current production	**10.9**	**1.2**
- municipal wastewater	7.4	0.8
- wastewater potato industry	2.9	0.3
- wastewater dairy industry	0.7	0.1
E. Potential to scale up (C - D)	**299**	**33**
Potential to scale-up factor	27	27

Other feedstock – product – market combinations

	Feed availab	Technology maturity	Market potential product	Scale up potential
Biowaste, green waste (AD and) composting	++	+++	++	++
Manure, AD and digestate	+++	++	+	+
Manure digestate, filtration, evaporation		+/-	?	?
Stripping and scrubbing		++	?	?
Hydrolysis (e.g. of digestate, chitin keratin)	+	+/-	?	?
Wood and green waste, pyrolysis, biochar	++	+	+	+
Wastewater, struvite precipitation	+	++	+	+
Plasma process, N-enriched manure slurry	+++	-	?	-

- Any ideas, data sources, etc. are welcome: please share in the chat or write an email to vis@btgworld.com. Thanks a lot!

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04

Preliminary insights on the regulatory framework

Lucile Sever, EBA

Regulatory analysis overview

1. Analyse current regulatory **drivers and barriers** for the uptake of bio-based fertilising products
2. Propose recommendations of **additional regulatory incentives** to support uptake
3. Define **regulatory indicators** for the upcoming multi-criteria decision analysis

By September 2026

Detailed overview

≤ 25 bio-based fertilising products

Compost
Digestate
Biochar
Struvite
Mineral concentrate
Potassium salts
Liquid ammonium nitrate/sulphate
Other innovative products

10 European legislations

Waste Framework Directive
Fertilising Products Regulation
Organic Farming Regulation
Animal By-Products Regulation
Nitrates Directive
Sewage Sludge Directive
Common Agricultural Policy
Carbon Removals and Carbon Farming (CRCF) Regulation
EU Taxonomy
Critical Raw Materials Act

≤ 20 national case studies

Greece
Spain
Italy
Poland
Germany
Netherlands
Belgium

European legislations

- Waste Framework Directive
- Fertilising Products Regulation
- Animal By-Products Regulation
- Common Agricultural Policy
- Organic Farming Regulation
- Nitrates Directive
- Carbon Removals and Carbon Farming (CRCF) Regulation
- Sewage Sludge Directive
- EU Taxonomy
- Critical Raw Materials Act

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