

Industry Overview



INDUSTRY

By 2050, world population is expected to reach 10 billion- a 30% increase from 2020. To ensure the necessary crop yields needed to feed our growing population, farmers look towards either conventional or alternative/organic fertilisers to improve crop yields.

In the EU, the use of conventional fertilisers prevails – they are used on 75% of EU agricultural lands and have a global increase in their application rate of 2% per year. Over the last 50 years, the use of conventional fertilisers has led to 60% of the increase in EU agricultural yield, highlighting their importance for the sector. These fertilisers generally contain higher nutrient concentrations and provide quick nutrient release, leading to fast yield increases. However, the cost of this high concentration and quick release is the leaching of excess nutrients into the surrounding ecosystems, threatening their integrity and wasting valuable, often imported, resources.

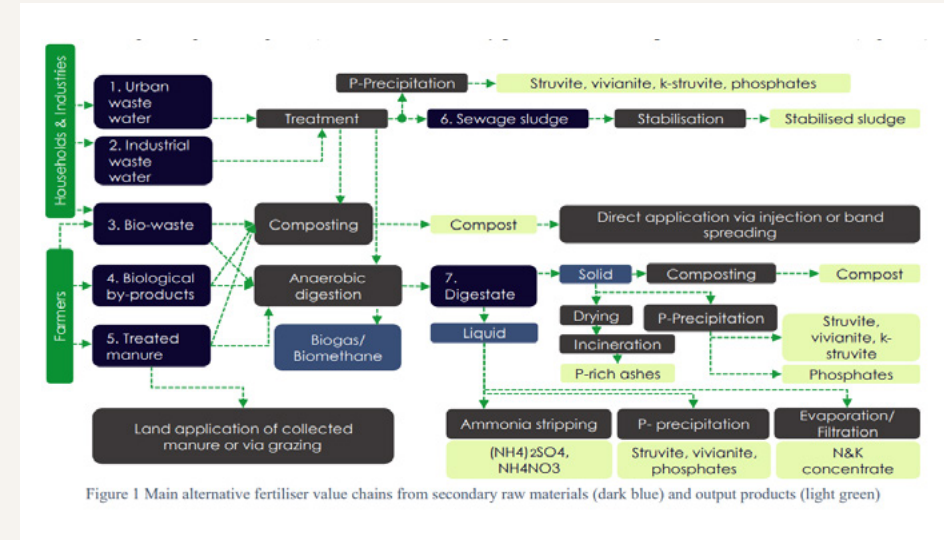


Figure 1 Main alternative fertiliser value chains from secondary raw materials (dark blue) and output products (light green)

FACTS

ICON	23% of EU agricultural land uses alternative fertiliser.	ICON	71% of potassium oxide imported, mainly from Russia.
ICON	Up to 80% of Nitrogen from conventional fertilisers releases to water bodies .	ICON	Gas is an input for fertiliser production

RESOURCES

- Aenean lacinia bibendum nulla sed consectetur.
- Morbi leo risus, porta ac consectetur ac, vestibulum at eros.
- Nullam quis risus eget urna mollis ornare.
- Duis mollis, est non commodo luctus, nisi erat porttitor ligula, eget lacinia odio sem nec elit.
- Praesent commodo cursus magna.

Project Overview



ABOUT

FER-PLAY is facilitating the uptake of alternative fertilisers, to protect ecosystems, decrease EU dependence on fertiliser imports, foster circularity and improve soil health. The project will map and assess alternative fertilisers made from secondary raw materials, such as manure, and highlight their multiple benefits in order to promote their wide-scale production and use on field.

Alternative fertilisers, in particular those made from secondary raw materials (e.g. manure) can provide yield benefits while reducing environmental damage and improve EU resource independence. However, there is a lack of awareness and knowledge about what alternative fertilisers are and their potential benefits, as well as uncertainty both in terms of social acceptance and regulatory framework for their use.

With billions of tonnes of fertilisers spread on farms across Europe, and in support of the European Green Deal fertilisers reduction targets, among other strategies, it is crucial to increase alternative fertilisers use, reducing the threat to human and ecosystems health, and increasing the sustainability of the European food system.

Overall FER-PLAY methodology

Implementation of FER-PLAY follows a logical order of four steps, described further below (Figure 3):

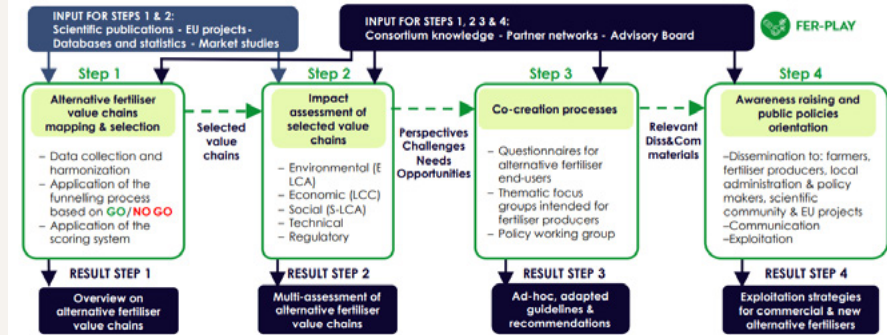
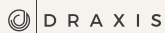


Figure 3 Overall FER-PLAY methodology

PARTNERS



KEYWORDS

- Alternative fertilisers
- Resource efficiency
- Alternative fertilisers value chains
- Conventional fertilisers
- Life cycle assessment
- Sewage sludge
- Bio-waste
- Organic by-products
- Wastewater

BUDGET

For more details about Partners and Budget, visit [CORDIS](#).



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