

BIO-BASED, BIODEGRADABLE AND COMPOSTABLE MATERIALS OFFER A PRAGMATIC AND READY-TO-USE CONTRIBUTION TO THE WORLD'S PLASTIC POLLUTION PROBLEM

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SPHERE GROUP

Founded in 1976, SPHERE is a French family-owned group and the **European leader in household packaging.**

***BAGS:** for waste collection, fruit and vegetables, freezing, etc.*

Kitchen WRAPPING, PAPER and TRAYS.

Specialized in professional food and non-food packaging.

Among the **world's leading producers** of bio-based, biodegradable and compostable materials and products.

640 M€
turnover

+ 5% of
turnover
invested in
R&D

1480
staff

15 production sites, all in Europe, including 7 in France

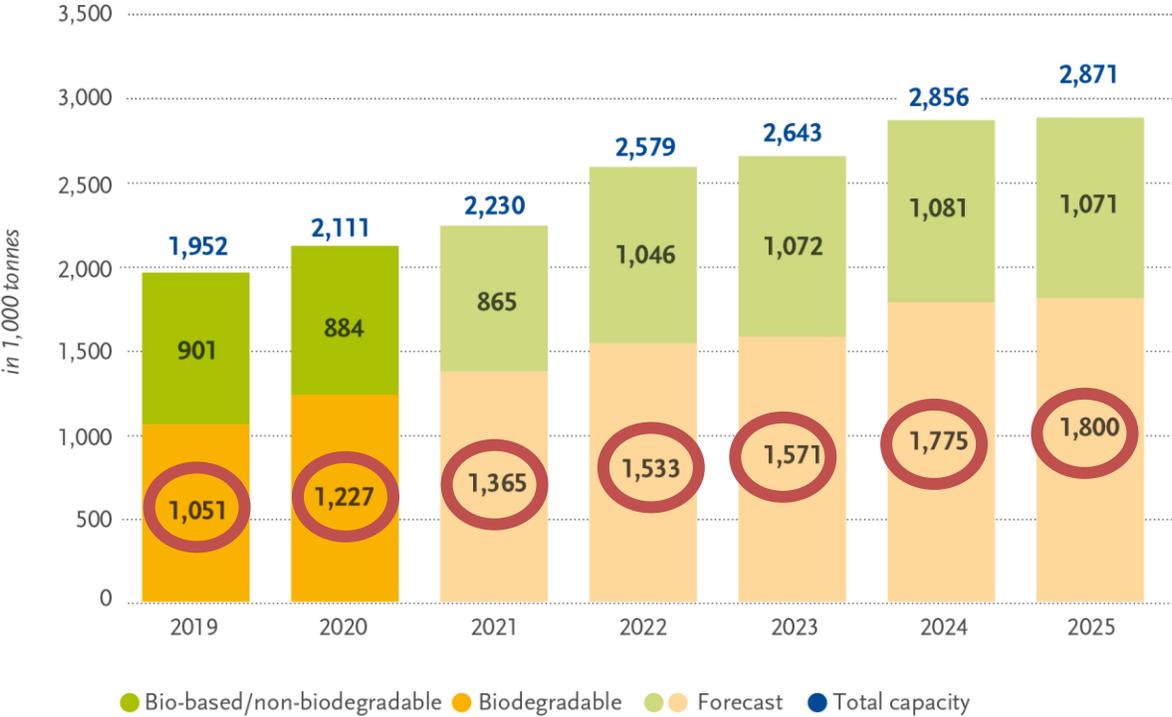
SPHERE manufactures and distributes a range of innovative products with lower environmental impact using:

- Recycled PE (over 50% of total production)
- Bio-based PE
- Bio-based, biodegradable and compostable resins
- Paper

EUROPEAN BIOPLASTICS (EUBP)

EUBP - ASSOCIATION REPRESENTING THE INTERESTS OF THE THRIVING BIOPLASTICS INDUSTRY IN EUROPE

Global production capacities of bioplastics



A significant and growing industry with European leaders.

Source: European Bioplastics, nova-Institute (2020)
 More information: www.european-bioplastics.org/market and www.bio-based.eu/markets



FRUIT AND VEGETABLE BAGS ARE AN EXAMPLE OF A BIODEGRADABLE APPLICATION THAT OFFERS A SOLUTION TO THE CHALLENGE OF PLASTIC POLLUTION

Challenges faced :

- *Promote qualitative and quantitative sorting of bio-waste by all inhabitants*
- *Decrease pollution of bio-waste by non biodegradable items including conventional plastics*
 - *Provide everyone with an easy tool to facilitate sorting and collection of bio-waste*

ADEME's technical recommendations (2019)

Bio-based, biodegradables and compostable bags have a better **environmental performance** than alternatives on the market in terms of life cycle and consumer behaviour.



Study by Greenpeace in the UK (2019)

1.5 billion reusable plastic bags distributed, to a population of 67 million.

Avis de l'ADEME sur l'impact environnemental des sacs d'emballage F&L

<https://bibliothèque.ademe.fr/dechets-economie-circulaire/545-avis-de-l-ademe-sur-l-impact-environnemental-des-sacs-d-emballage-fruits-et-legumes.html>

Greenpeace : Checking Out on Plastics II: Breakthroughs and backtracking from supermarkets

<https://eia-international.org/wp-content/uploads/Checking-Out-on-Plastics-2-report.pdf>

STUDIES TO BE NUANCED

- Confusion between compostable films certified according to EU standard EN 13432, traditional plastic films and products that claim to be "*biodegradable*" but which are in reality "*oxodegradable*".
- Lack of analysis of the biodegradation (bio-assimilation) process.

Study by ADEME (2020)

Existing specification standards that assess the biodegradation of plastics are **severe and pertinent**. Today, the evidence of plastic pollution comes **exclusively from non-biodegradable plastics**.

PRODUCTS AT THE SERVICE OF CURRENT EU REGULATION

EU « SUP » Directive (2019/904)

SPHERE and EUBP in favour of a **ban on oxo-degradable plastics.**

EU « Waste » Directive (2018/851)

Obligation to separate and collect bio-waste by the **31st of December 2023.**



Directive 2018/851

<https://eur-lex.europa.eu/legal-content/FR/TXT/PDF/?uri=CELEX:32018L0851&from=FR>

Directive SUP 2019/904

<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019L0904&from=fr>

A PROVEN AND EFFECTIVE SOLUTION

Free distribution of compostable bio-based fruit and vegetable bags facilitates sorting and collection of bio-waste because the container (bio-based compostable bag) can be organically recycled with its content (organic waste).



Carrier bags for fruit and vegetables



Containers for bio-waste

MILAN (ITALY)

Bio-waste collection **from 28kg/capita to 103kg/capita** in a few years due to a strong regulation and efficient bio-waste management facilities (organic recycling).

EU

A ban on traditional lightweight plastic bags with a derogation for bio-based and compostable bags in several EU countries has led to the drastic **reduction of microplastics in compost.**

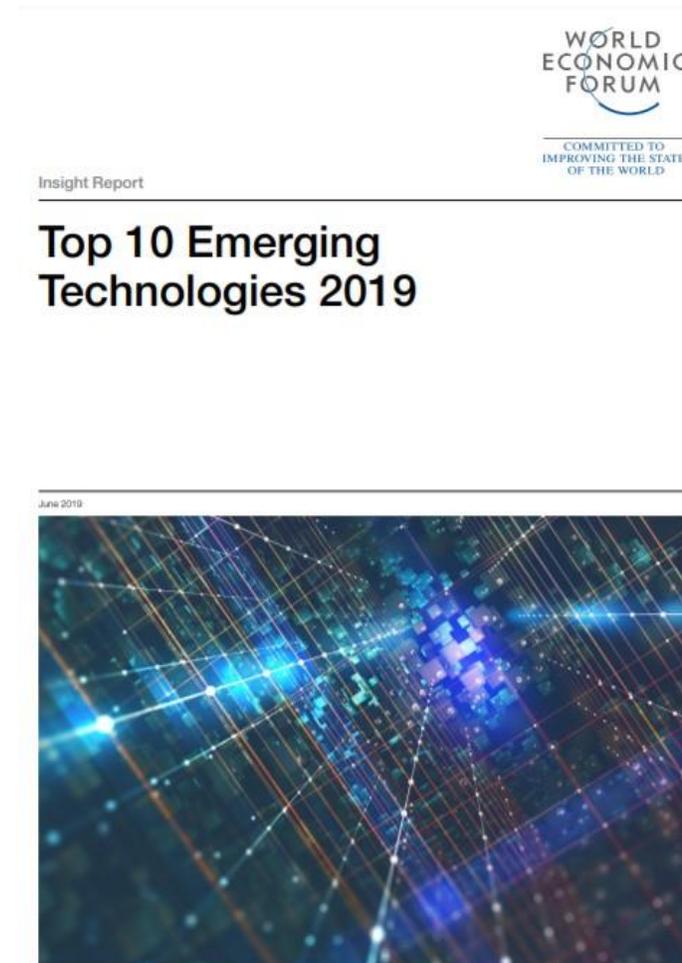
TOP 10 EMERGING TECHNOLOGIES (WEF)

The development of bio-based, biodegradable and compostable materials and products offers the EU an opportunity of leadership at global level to fight plastic pollution.

The World Economic Forum (WEF) has ranked bioplastics **number 1 of the 10 emerging technologies in 2019** and highlighted their contribution to a **circular economy**.

WEF: Top 10 Emerging Technologies 2019

http://www3.weforum.org/docs/WEF_Top_10_Emerging_Technologies_2019_Report.pdf



CONCLUSION

Bio-based, biodegradable and compostable materials are fully in line with the objectives of the circular bioeconomy and the Green Deal vision:

In line with ecological and economic objectives:

→ From soil to soil

→ Reallocation of thousands of jobs in Europe

- ✓ Display the same resistance and convenience qualities as conventional plastics
 - ✓ Promote sorting of food waste at source
- ✓ Capacity to be recycled as organic waste and turned into compost (≠ incinerated or buried)
- ✓ Compost maintains soil fertility, which is increasingly crucial for food security, and contributes to the storage of carbon
- ✓ Sector of excellence, with 25+ years of European know-how, suitable for industrial relocations in the EU, synonymous with job creation.

POLICY RECOMMENDATIONS

- 1.** Put in place an **exchange of best practices** between EU towns and cities on sorting, collecting and recycling of bio-waste, following the successful examples of Milan (IT), Lorient (FR), La Seu d'Urgell (SP), etc.
- 2.** Ensure that a revision of EN 13432 covers not only compostable plastics but also incorporates **realistic guidance on effective composting timelines.**
- 3.** Enable the emergence of current and future applications where biodegradability/compostability will provide significant environmental benefits including **maximum recovery and separate collection of biowaste.**

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THANK YOU FOR YOUR ATTENTION !

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