



AIMPLAS

Excellence in plastics



What is AIMPLAS?

A **technology centre** with more than 30 years' experience in the plastic sector.



Add value to companies to generate **wealth** and create **employment**.



Add value to society to improve quality of life and ensure environmental sustainability.

Our Purpose



More than **12,000 m²**
of cutting-edge
facilities

Pilot plants (6,500 m²)

Laboratories (4,500 m²)

"Policy recommendations packaging regulations biomaterials "

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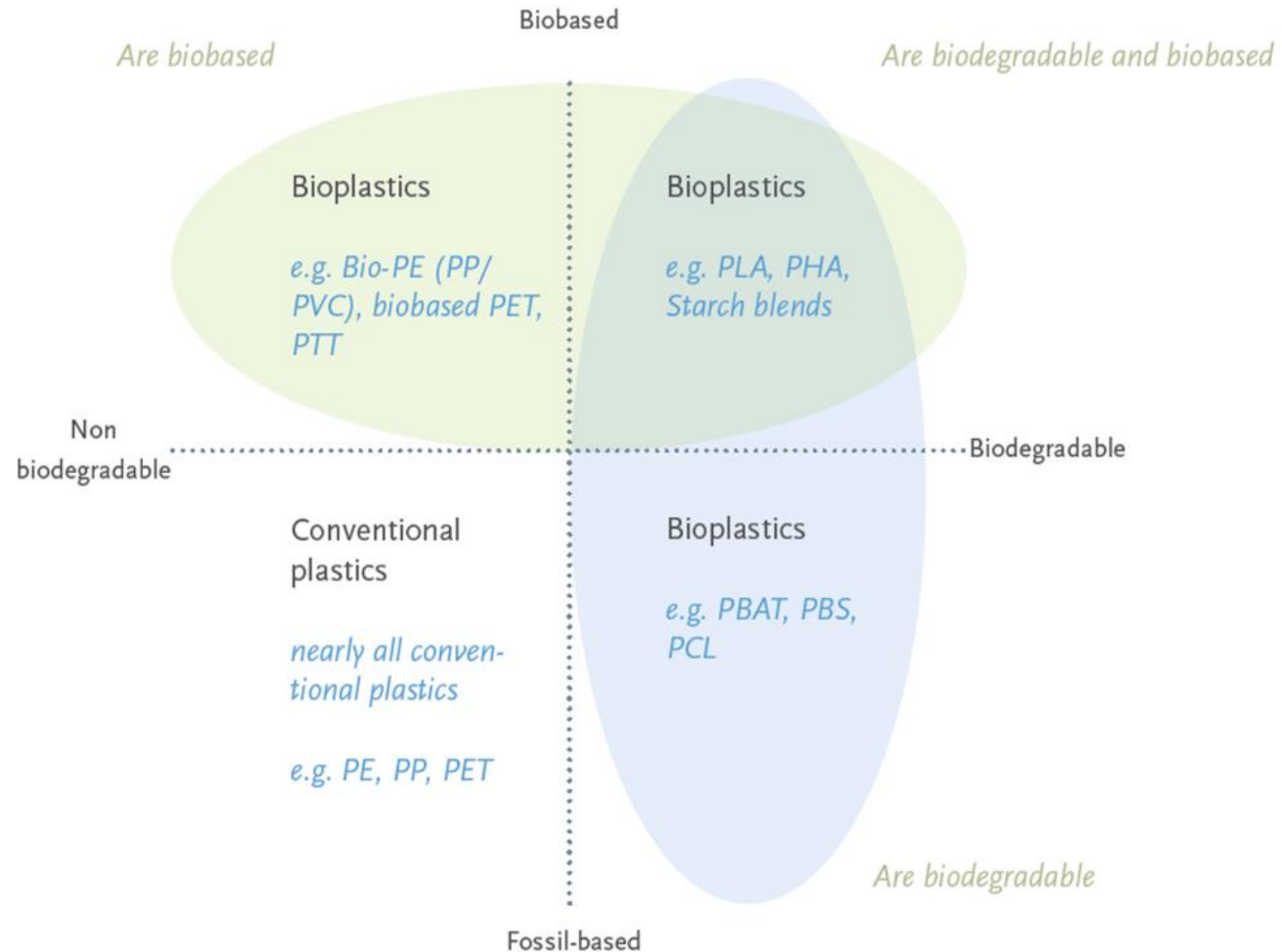


AIMPLAS

1. Introduction
2. Current EU regulatory framework for biomaterials in packaging
3. Policy recommendations and conclusions

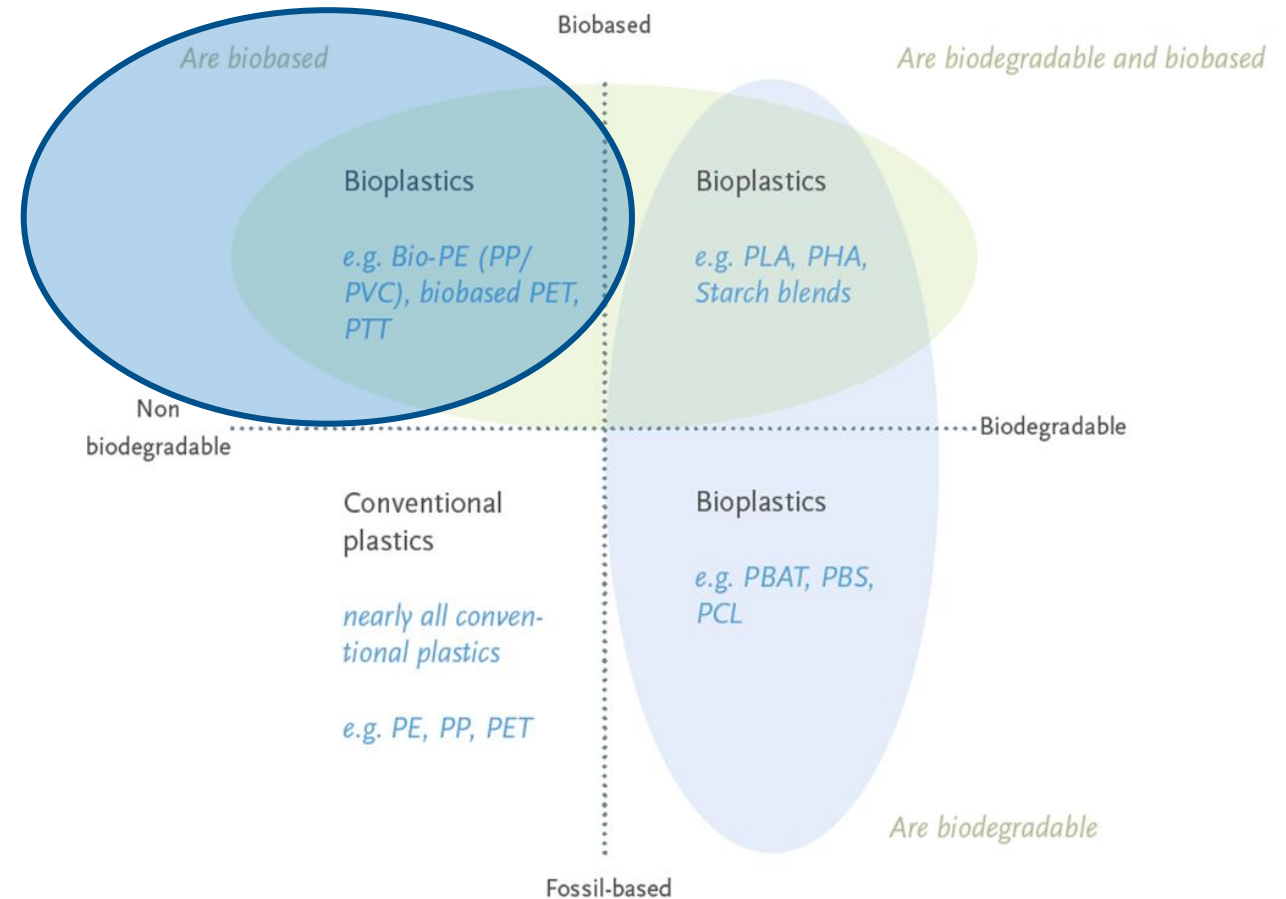
INTRODUCTION

Biomaterials



What is a bio-based, non-biodegradable plastic?

Bio-based counterparts to traditional ones would have a joint end of life with traditional flows
→ Conventional recycling techniques

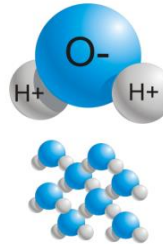


What is biodegradable plastic?

What?



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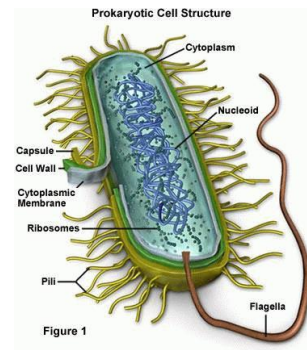
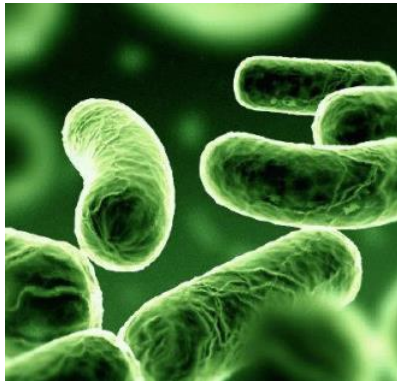
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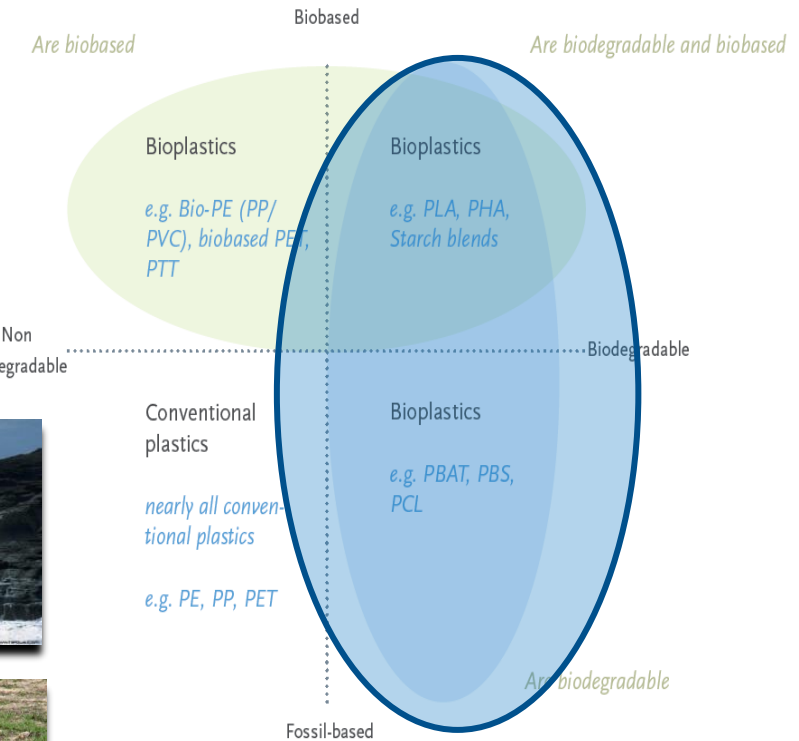
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Who?



Where?



Biodegradability issues

- Biodegradability by itself does not add value and can be misinterpreted by the consumer...

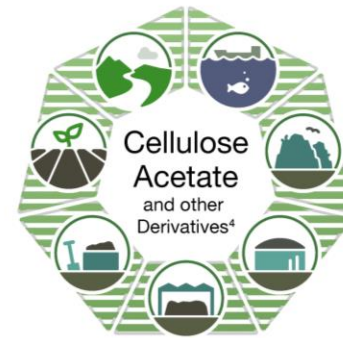


...relaxing their commitment/**obligation** to **THEIR** waste...

- The priority is to avoid littering and to recover waste, through coordinated and realistic communication...
 - ...in order to make the best use of resources and avoid pollution



Bioplastics family vs biodegradability environment



ENVIRONMENTS

Details on test conditions and, if available, applicable pass/fail criteria.



MARINE ENVIRONMENT

Temperature 30°C,
90% biodegradation within
a maximum of 6 months
(Certification: TÜV AUSTRIA OK
biodegradable MARINE (ISO under
preparation))



FRESH WATER

Temperature 21°C,
90% biodegradation within
a maximum of 56 days
(Certification: TÜV AUSTRIA OK
biodegradable WATER)



SOIL

Temperature 25°C,
90% biodegradation within
a maximum of 2 years
(Certification: TÜV AUSTRIA OK
biodegradable SOIL; DIN Certco
DIN-Geprüft biodegradable in soil)



HOME COMPOSTING

Temperature 28°C,
90% biodegradation within
a maximum of 12 months (Certification:
TÜV AUSTRIA OK compost HOME; DIN
Certco DIN-Geprüft Home
Compostable)



LANDFILL

No standard specifications or
certification scheme available,
since this is not a preferred
end-of-life option



ANAEROBIC DIGESTION

Thermophilic 52°C / mesophilic 37°C;
standard specification not yet
available, but 90% generally
considered as completely
biodegradable

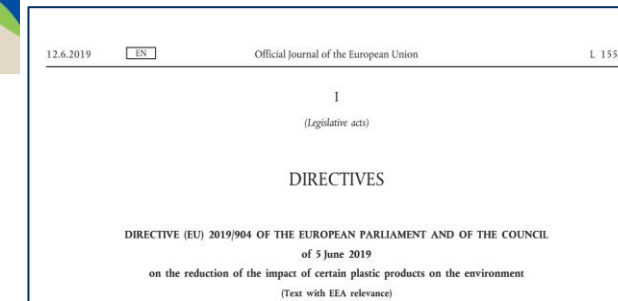


INDUSTRIAL COMPOSTING

Temperature 58°C,
90% biodegradation within
a maximum of 6 months
(Standard: EN 13432)

Current EU regulatory framework

Bioplastics Regulatory Framework



Several policies, many of them related to the European Green Pact, have the potential to boost the role of bioplastics in the development of a truly circular bioeconomy, enabling innovation and attracting new investments. In order to contribute to the EU's ambitious climate goals, it is important that relevant legislation acknowledges the important role of bioplastics within a circular economy. In recent years, the European Union has made increasing efforts to introduce or adapt policies, regulatory frameworks and standards to strengthen and implement the bioeconomy and the circular economy in Europe, all of which affect the bioplastics sector in one way or the other.





Mainly for the packaging sector and composting or the use of renewable sources in other sectors.

Policy recommendations and conclusions

Ecolabels

The plastics sector maintains its competitiveness by continuously improving the environmental impacts of its products. The communication of these environmental improvements is key to promote the use of these environmentally friendly plastic products. Ecolabelling of products according to recognised schemes and based on international standards is the most recommended option for effective and reliable communication.

Bioplastics can be bio-based (bio-based) or end-of-life (compostable / biodegradable). However, simply because a product is made of such bioplastics does not guarantee that it meets this condition. To demonstrate this, there are environmental labels focused on these parts of its life cycle (origin or end-of-life), for which the testing requirements and characteristics described in the regulations and application schemes must be met.

ECOLABEL	MEDIUM	CONDITIONS
	Industrial composting	T high(< 58° C) Bacteria and fungi
	Home composting	T normal (20-30 °C) Bacteria and fungi
	Soil	T normal (25 °C) Bacteria
	Aqueous/ marine	T normal (>20 °C) Diluted bacteria

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