

### Final bioplastic safety protocol produced and approved

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## Revision and history chart

Version	Date	Main author	Summary of changes
0.1	28.04.2023	C. Fletcher	Drafting of Release Statement
0.2	28.04.2023	J. Barbir	Final check / submission





#### Abstract

This document fulfils the requirements set out by the Project Handbook (Deliverable 2.3) to publish the BIO-PLASTICS Europe Safety Protocol. This document contains the release statement (including the link to the safety protocol) that will be used to publicly launch the tool on the BIO-PLASTICS Europe website.

### Keywords

Bio-based plastic, biodegradable plastic, safety, human health, environmental health, interactive tool.

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	Abstract	ii
	Keywords	ii
	Disclaimer	ii
	Acknowledgement	ii
	Executive Summary	v
1	Safety Protocol release statement	1





# List of Abbreviations and Acronyms

Abbreviation	Meaning
ASSOBIOPLASTICHE	Assobioplastiche Servizi Societá A Responsabilitá Limitata
HAW	Hamburg University of Applied Sciences
ННІ	Heng Hiap Industries
MMU	Manchester Metropolitan University
NP	Natureplast
PI	Prospects Institute
TALTECH	Tallinn University of Technology
TICASS	Tecnologie Innovative per il Controllo Ambientale e lo Sviluppo Sostenible scrl





#### **Executive Summary**

This report, which presents the release statement for the public launch of the BIO-PLASTICS Europe Safety Protocol and forms part of Work Package 6 – Safety Components (Task 6.5 Production of the bioplastic safety protocol) of the project "Developing and Implementing Sustainability-Based Solutions for Bio-Based Plastic Production and Use to Preserve Land and Sea Environmental Quality in Europe (BIO-PLASTICS EUROPE)" under the H2020 Grant Agreement No. 860407.

The general objective of this deliverable is to provide a means by which the commission (and the wider public) can access the final BIO-PLASTICS Europe Safety Protocol.

This document has been delivered to the European Commission in April 2023 (M43).

For any comments on this report, please contact the Project Coordinator:

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### 1 Safety Protocol release statement

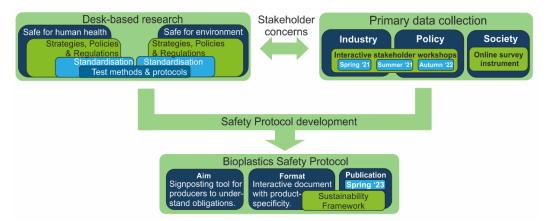
#### Introducing the BIO-PLASTICS EUROPE Safety Protocol.

By Carly Fletcher (MMU)

28.04.2023

Bio-based and biodegradable materials have the potential to replace traditional petroleum-based plastics across a range of products; possibly contributing to a more circular economy. However, the uptake of these materials will not succeed unless consumers, manufacturers, and regulators are convinced of their efficacy. While researchers and innovators are taking steps to address issues related to technical performance, mechanisms which ensure that products made from new materials are safe (for human health and the environment) have received much less attention. Indeed, whilst efforts have been made to develop new standards that define what a bio-based or biodegradable plastic is, further consideration of the potential impacts across the value chain often rely on pre-existing mechanisms that were originally developed for traditional petroleum-based plastics.

Over the last three and a half years, colleagues from eight project partners (PI, HAW, TICASS, ASSBIOPLASTICHE, TALTECH, HHI and NP), led by the Manchester Metropolitan University (MMU), and with support from the wider BIO-PLASTICS EUROPE consortium, have explored the multitude of rules, regulations, recommendations, and directives that underpin the safe and sustainable use of bio-based and biodegradable plastics. A truly collaborative affair! As shown by the figure, both desk-based research and stakeholder engagement activities have been used to collect, collate, and synthesise information that producers of bio-based and biodegradable products may find relevant.



Using all the information gathered, an interactive tool has been developed that allows users to explore different documents that may be relevant in keeping bio-based and biodegradable plastic products safe and sustainable. The tool also includes added product specificity, where the information has been aligned to the product groups targeted within the BIO-PLASTICS EUROPE project – toys, products that come into





Horizon 2020

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contact with food and other substances (packaging and cutlery), products used on the land (mulch films and geomembranes), and products used within aquatic environments (fish crates and baits).

The tool is targeted at companies that are looking to introduce either bio-based or biodegradable plastics into their product lines and will help to navigate the safety requirements that are associated with them. Simply put, it acts to signpost a range of European and International regulations, standards, etc., as well as relevant certification schemes that the company could consider.

The BIO-PLASTICS EUROPE Safety Protocol can be accessed directly through this link (it is best viewed on a computer screen, laptop, or tablet): https://xd.adobe.com/view/2c735ca9-34c2-4b6f-b596-d9afdffbdb84-7920/?fullscreen

In addition to this tool, BIO-PLASTICS EUROPE partners, MMU and HAW, are currently developing a Sustainability Framework for Bio-based Projects. This will complement the Safety Protocol and will be published by the end of the project – so keep your eyes peeled!

\*\*\*\* END \*\*\*\*



Page 2 | 8