



Newsletter 06\_2022

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share information  
gain insights

## Welcome to the sixth issue of the BIO-PLASTICS EUROPE Newsletter!

This issue of the newsletter focuses on the social and societal aspects of the BIO-PLASTICS EUROPE project. After three years of the project, we want to take a look at how the project engages stakeholders, disseminates its results and how it utilizes scientific results to shape future policy on bio-based plastics for a more sustainable future. Please enjoy reading about the latest General Assembly Meeting, how recommendations for policy and industry standards are formed and how networks and open online resources are used to disseminate project results.

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## The 3<sup>rd</sup> General Assembly Meeting in Rome partners finally meeting in person!

By Jasmin Röseler (HAW Hamburg, Germany)

After three years of online meetings, the BIO-PLASTICS EUROPE consortium was finally able to meet in person again for the 3<sup>rd</sup> General Assembly Meeting in Rome, Italy, from 21<sup>st</sup> to 22<sup>nd</sup> September 2022. The meeting was held at the NH Collection Roma Centro Hotel, organized by the University of Applied Sciences Hamburg (HAW Hamburg) and hosted by the National Research Council of Italy (CNR) and Assobioplastiche Servizi (ASSO-BIO). The meeting was organized to align the ongoing and future tasks of all project partners. All consortium partners were represented together with two advisory board members who offered their feedback to the project outcomes presented.

After a warm welcome by the hosts CNR and ASSO-BIO, the project coordinator Prof. Walter Leal (HAW Hamburg) kicked-off the meeting and the

lead project manager Dr. Jelena Barbir (HAW Hamburg) offered an overview of the project's status and progress.

The rest of the first day of the General Assembly meeting was focused on the technical aspects of the BIO-PLASTICS EUROPE project. Simon Gölden (Fraunhofer LBF) and technical coordinator of the project, Elisabetta Arato from Tecnologie Innovative per il Controllo Ambientale e lo Sviluppo Sostenibile scrl (TICASS) presented the progress in the work on innovative design of new bio-based compounds and results regarding biodegradability and toxicity of the developed materials. Both overviews were followed by multiple poster presentations, offering closer insights into the work conducted within the project.

Finally, the first day of the meeting was concluded with some words coming from the project's advisory board members. Prof. Fabio Fava and Prof. Maximilian Lackner shared some important pointers for the future of the project and joined the partners for



Figure 1: Project partners were able to meet in Rome for the 3<sup>rd</sup> General Assembly meeting (Source: ASSO-BIO).

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individual discussions and coffee to conclude the first day of the meeting.

The second day focused on social and societal aspects of the project. The meeting was opened by an overview of the visibility of the project and its results by Jasmin Röseler (HAW), followed by presentations from several partners on how their work contributes to the development of policy recommendations for the bio-based plastics sector.

Work package leaders presented their progress on safety protocols (Carly Fletcher, Manchester Metropolitan University (MMU)) and life cycle assessments of bio-based plastics (Marie-Christin Rische, Hamburg

Institute of International Economics (HWWI)), new business models (Eleonora Foschi, University of Bologna (UNIBO)) and impacts on waste management frameworks (Žaneta Stasiškienė, Kaunas University of Technology (KTU)). The official part of the meeting was concluded with many fruitful discussions regarding individual work packages. A Gala dinner was the closing highlight to this 3<sup>rd</sup> General Assembly meeting in Rome. The meeting emphasized the great progress the project was able to achieve over the last three years and helped to draw out a path for the fourth and final year to maximize the impact of the project.

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### Broadening collaborations to answer policy questions: BIO-PLASTICS EUROPE is joining forces with other projects for policy recommendations

By Jelena Barbir and Jasmin Röseler (HAW Hamburg, Germany)

The European Bioplastics Research Network (EBRN) was established by the BIO-PLASTICS EUROPE project to provide a platform for researchers, companies and stakeholders in the field of bio-based and biodegradable plastics in order to connect and exchange knowledge and experience. A networking group has been established on LinkedIn with over 750

members that engage in lively exchange. The network also invites its members to regular events or to engage further with the project in various dissemination activities.

In June 2022, BIO-PLASTICS EUROPE brought together 10 EU funded projects in the field of bio-based plastics and 9 EU policy officers during the 6<sup>th</sup> EBRN event focused on drawing combined expertise of the projects to formulate policy recommendations. The event was a great success and, as an outcome, a shared document, posing and answering important policy and research questions, has been produced. The document is available for interested stakeholders on the BIO-PLASTICS EUROPE website:

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<https://bioplasticseurope.eu/downloads/project-events>

Following the success of the roundtable event, BPE partnered with GLAUKOS project, that actively contributed to the event, to organize two follow-up workshops. The first open workshop on 3rd November 2022 “Unlock the potential of bio-based and biodegradable plastics: challenges to be addressed” will bring together 20 projects in the field of bio-based plastics to work on the topics LCA of bio-based vs. conventional plastics, different end-of-life solutions and awareness of different stakeholders. The projects will collect relevant questions to be posed to the EU policy officers during the next event. Invitations to this workshop have just been sent out and you can register here: [Unlock the potential of bio-based and biodegradable plastics: challenges to be addressed \(google.com\)](https://bioplasticseurope.eu/downloads/project-events)

The second workshop on 23rd November 2022 will be the 7<sup>th</sup> EBRN event and will take the form of another roundtable with projects and EU policy officers, during which the officers will address the questions collected by the projects during the first workshop. Participants will be invited soon and more information will be announced. Additionally, the event

will be livestreamed on YouTube, so make sure to save the date and stay updated. You will not want to miss it!



Figure 2: From the results of the 6<sup>th</sup> EBRN event, a document posing and answering questions from projects and EU policy officers was produced (Source: HAW).

The EBRN network has and continues to contribute to the efforts of BIO-PLASTICS EUROPE to positively influence the policy landscape on bio-based and biodegradable plastics towards a safer more sustainable future. Bridging the gap between research and policy in Europe one event at a time!

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## Work in Progress: The Bio-based Plastics Sustainability Framework

By Carly Fletcher, Elen Parry (MMU, United Kingdom) and Cintia Nunes (HAW Hamburg, Germany)

Sustainability is a crucial element of the BIO-PLASTICS EUROPE project and is intertwined across all our tasks. Thus, we must make sure that all work completed and communicated beyond aligns with sustainability objectives.

environmental concerns, along with the promotion of economic development and social well-being. Since its publication in 1987, this definition of sustainable development has been explored and conceptualised in many frameworks, including the UN Sustainable Development Goals (SDGs)<sup>1</sup>. While these goals are intended to apply universally to all countries, the EU have been prominent in using them as a compass, not only when developing new policies and strategies, but also when dealing with economic, social, and environmental crises.

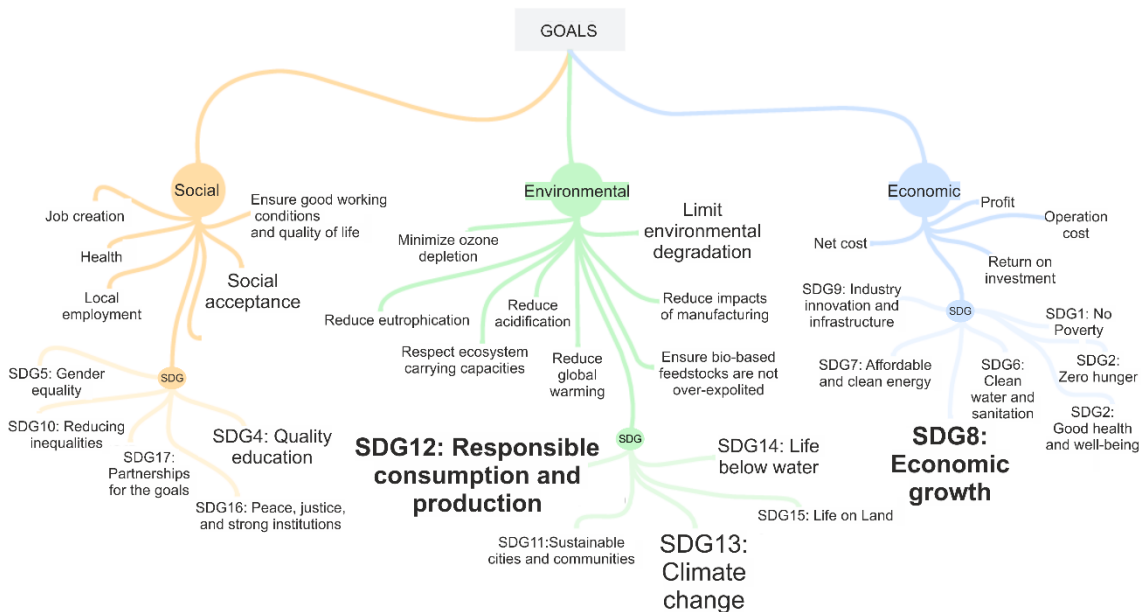


Figure 3: Goals of sustainability frameworks identified by a study conducted by MMU (Source: MMU).

But first, what exactly is sustainability? The United Nations Brundtland Commission defined sustainability within its seminal report, Our Common Future, as: “meeting the needs of the present without compromising the ability of future generations to meet their own needs”. This definition encapsulates the consideration of

So far so good. However, the main stumbling block for achieving sustainability is its operationalisation, in other words: what are the actions and activities that stakeholders need to do to achieve sustainability?\_Many people and organisations are trying to answer this question, so much so that studies on sustainable practices have

<sup>1</sup> <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

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increased across industry and academia. In short, researchers and practitioners are developing sustainability frameworks, that is: tools that help identify impacts and support sustainable practices.

Research completed by Manchester Metropolitan University, focused on how the uptake of the term “sustainability framework” is trending within the literature, and reviewed 234 sources that included, or described, a version of this concept to understand what makes a really effective sustainability framework. A key output from this work was the identification of key themes and concepts mentioned by these sources and how they are used to ensure sustainability. This research found that most sustainability frameworks are configured around four key stages:

- (1) *Focus* – what is the product, company or activity considered,
- (2) *Goals* – what is the sustainability framework hoping to achieve,
- (3) *Strategies* – what are the actions needed to either achieve the goal or record progress, and
- (4) *Assurance* – how can any steps/action taken be qualified or assessed (ideally by an independent third party).

As presented by the visual map in Figure 3, the sustainability goals analysed tend to be equally aligned between the three pillars of sustainability: social, environmental, and economic. Of particular note here are the objectives to reduce environmental degradation and social acceptance

(ensuring that society approves innovations that are more sustainable), which were included in multiple sources. In addition, there is notably a high level of recognition of the UN SDGs across the sources assessed, in particular SDG 12: Sustainable Consumption and Production and SDG8: Economic Growth, and to a lesser extent SDG4: Quality education, which were all recognised by several sources.

After concluding this study, we now know more about what a sustainability framework can be. Our next steps will see us move to a more focused position: understanding how a sustainability framework could be developed for the biodegradable bio-based plastics sector. To do this, we will gather inputs from all of our project partners during our upcoming General Assembly in September 2022. We will also be hosting an online interactive event in Spring 2023, in collaboration with European Bioplastics (an industry association), to gather input from wider stakeholders and members of the public. So, we invite you to keep checking our events pages for more details on this exciting collaboration.

Using all this information, we will develop the Bio-based Plastics Sustainability Framework as a part of the Bio-based Plastics Safety Protocol. This tool will ensure that sustainability is comprehensively considered in this up-and-coming sector – we aim to release our findings by Summer 2023. So watch this space!

## Together for a future without plastic waste: An update on the Historic Cities against Plastic Waste (HISCAP) Network

By Prof. Dr. Žaneta Stasiškienė (KTU, Lithuania) and Friederike Gölitzer (HAW Hamburg, Germany)

The HISCAP (Historic Cities Against Plastic Waste) network is one of two networks created by the BIO-PLASTICS EUROPE project. Historic cities are especially vulnerable to the many problems caused by plastic pollution. On the one hand, they might have to handle more plastic waste than other cities because intense tourism often goes hand-in-hand with increased plastic pollution. On the other hand, small alleys and limited space in general, make it harder to find new solutions for collecting and disposing plastic waste. Therefore, the HISCAP network focuses on increasing collaborative knowledge and capacity building by exposing new approaches, methods, and pilot initiatives, as well as best practice examples which are then shared with the network members and the wider public. In addition, the network explores how bio-based plastic alternatives could play a part in solving the challenges historic cities are facing.

A lot has happened in the HISCAP network over the last few months. The network has grown even further, and



Figure 1: The HISCAP Network is developing as a community of municipalities across Europe (Source: HAW Hamburg)

the website has been updated. In the last month, Alexandros Lingos, a member of the BIO-PLASTICS EUROPE team at HAW Hamburg, was able to establish fruitful collaborations with many municipalities from Greece and to prompt the Skyros Port Authority to join the network. As a native speaker, he was able to get directly into contact with the municipalities and introduce them to the HISCAP Network. Because of that, the network is now counting 20 new Greek members. To date, the HISCAP network now has 81 members including the municipalities, research institutions, agencies and companies. In order to learn more about the members, please explore our interactive



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map: <https://bioplasticseurope.eu/hiscap>.

Finally, the HISCAP Network will be part of an upcoming workshop hosted by our partner; Prospex Institute (PI) Belgium, which will take place on the 29<sup>th</sup> and 30<sup>th</sup> November in Brussels. The workshop will focus on evaluating the efficiency of BIO-PLASTICS EUROPE's first public deliverable, the Handbook on the impacts of bio-based and biodegradable plastics on existing waste management frameworks, which was published in April this year and is available on the project website:

<https://bioplasticseurope.eu/downloads/public-deliverables>.

The workshop will explore how BPE partners developed the handbook by considering previous stakeholder remarks, and presenting the workshop participants an opportunity to provide further comments to improve the practical usability even further. Invitations will be sent out in the coming weeks to the stakeholders, HISCAP representatives and other interested parties.

Over the coming months, our goal will be to invite even more municipalities that share the HISCAP vision to join the network and to support all members of the network on their paths towards a future where plastic waste will be a problem of the past. Stay tuned!

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### The new plastics economy: circular business models and sustainability

By Alessandra Bonoli, Angelo Paletta, Eleonora Foschi and Luigi Mersico (UNIBO, Italy)

The misunderstanding around “bioplastics” led the BIO-PLASTICS EUROPE project to undertake a robust educational initiative aimed at providing comprehensive knowledge in the field of bio-based plastics. The initiative includes a massive online open course (MOOC) and a summer school and is addressed to students, researchers, young entrepreneurs, managers, and practitioners who want to advance their expertise in the circular bioeconomy and become

leaders in the bio-based and biodegradable plastics industry.

A MOOC is an online course, that aims to be free, have unlimited participation and be open access. The course, named “The new plastics economy: circular business models and sustainability”, is now available online. Led by Alma Mater Studiorum – Università di Bologna, this course benefits from having contributions from 16 project partners across 11 different countries and many guest speakers from public and private sectors. It is also characterized by a multidisciplinary approach, addressing legislative, technical and managerial issues related to the so-called New Plastics Economy

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with a focus on the bio-based and biodegradable plastics industry.

Structured around an introductory and four content-based weeks, the

that can be used to showcase the skills and knowledge acquired.

The MOOC is available on UNIBOOK, the Alma Mater Studiorum - Univer-



*Figure 5: The New Plastic Economy: Circular business models and sustainability MOOC's Logo (Source: UNIBO).*

MOOC has 20 modules and more than 40 units, which will provide participants with valuable knowledge in the field of bio-based and biodegradable plastics.

The course will be delivered several times a year, with the first edition launching on 23<sup>rd</sup> September 2022. Participants that complete the course will receive a certificate of attendance

city of Bologna platform dedicated to innovation and digital learning. It can be directly access through the link:

[https://book.unibo.it/courses/course-v1:Unibo+BIO-PLASTIC101+2022\\_E1/about](https://book.unibo.it/courses/course-v1:Unibo+BIO-PLASTIC101+2022_E1/about)

Do not miss the opportunity to join this open access, innovative learning experience!



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Invitation to a survey: Do biodegradable plastics have a role to play in the circular economy? Have your say!

Our project partners the Swedish Environmental Research Institute (IVL), Prospex Institute (PI) and Tecnologie Innovative per il Controllo Ambientale e lo Sviluppo Sostenibile srl (TICASS) are conducting a survey to try and answer the question if biodegradable and compostable plastics are suitable in commercial and household applications.

**If you have expertise or knowledge in any of the following fields - agriculture, packaging, cutlery, toys and aquatic applications (e.g. fisheries), or in plastic material and waste management, your inputs would be highly appreciated!**

The results will eventually be translated into policy recommendations to facilitate the upscaling of bio-based and biodegradable plastics in Europe and support the transition to the circular economy.

Please access the survey here: <https://prospex.typeform.com/to/TwhjDKTZ>

Thank you for reading! We hope that you have enjoyed this sixth edition of the newsletters and that you will follow us in the future! If you still have not done so, please feel free to subscribe to our newsletter at:

[www.bioplasticseurope.eu](http://www.bioplasticseurope.eu)

Sincerely yours,

The BIO-PLASTICS EUROPE Project Team



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