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D7.9 Project video

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DISCLAIMER

This deliverable has been prepared in the context of the project CAFIPLA receiving funding from the Bio Based Industries Joint Undertaking (JU) in accordance with the grant agreement No 887115. The JU receives support from the European Union's Horizon 2020 research and innovation programme and the Bio Based Industries Consortium).

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Please refer to this deliverable as:

CAFIPLA – D7.9 (2022), Deliverable D7.9 Project video, May 2022.

EXECUTIVE SUMMARY

The goal of CAFIPLA is to develop an integrated pre-treatment process to convert heterogeneous organic materials to building blocks for the bio-based economy. To reach this aim, the CAFIPLA project focusses on an integrated biomass valorisation strategy that combines a carboxylic acid and a fibre recovery platform (CAP/FRP).

CAFIPLA is a market-oriented, R&D-driven project strongly relying on an interdisciplinary approach, both within the consortium as through stakeholder involvement. Therefore, a strong dissemination, communication, and exploitation strategy is fundamental for the project's success and the exploitation of the project results beyond.

The present document "D7.9 Project video" describes the objective, technical implementation, and envisioned distribution of a CAFIPLA video which introduces the general CAFIPLA concept and sets it in context with current challenges both at global and local levels. The video was compiled and designed such that it is easily comprehensible for all stakeholders including non-experts e.g., the general public, consumer organisations, the media, researchers and academics, policy makers but also other BBI/CBE projects, BIC and BBI consortia members, biowaste processors and producers and biogas plant owners.

The Project video introduces CAFIPLA's vision, goal, and technology in an engaging and graphically appealing way. Starting from a global, easily relatable context depicting today's global challenges such as the climate crisis and a need to transform from fossil to bio-based resources, the audience is guided towards the project's vision and technology and ends with summarising solutions the project offers and the technology's overall potential to address the beforementioned challenges.

To maximize its dissemination outcome, the video as a public deliverable will be distributed via a broad range of dissemination channels e.g., at future project events as an actual video file (.mp4) or as a Youtube link via the CAFIPLA website¹, advertised via the CAFIPLA LinkedIn channel and disseminated via the YouTube channel, Twitter and LinkedIn accounts as well as newsletters of DECHEMA.

¹ https://cafipla.eu/home_cafipla/ongoing/publication-and-media/

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ABBREVIATIONS

ABBREVIATION	DESCRIPTION
CAP	Carboxylic Acid Platform
FRP	Fibre Recovery Platform

1 INTRODUCTION

The deliverable “D7.9 Project video” of the CAFIPLA project is part of WP7: Dissemination, communication, and exploitation (Task 7.2 Dissemination) and refers to the conceptualization and design of a video, which introduces the project contents in an entertaining way to be further used for presenting the CAFIPLA concept and technology to reach stakeholders and encourage engagement with CAFIPLA.

The overall aim of CAFIPLA is to develop an integrated pre-treatment process to convert heterogeneous organic materials to building blocks for the bio-based economy. To reach this aim, the CAFIPLA project focuses on an integrated biomass valorisation strategy that combines a carboxylic acid and a fibre recovery platform (CAP/FRP). Since CAFIPLA is a market-oriented, R&D driven project that strongly relies on the interdisciplinary approach within the consortium as well as through active stakeholder involvement. Therefore, a strong dissemination, communication, and exploitation strategy is fundamental for the project's success and the exploitation of the project results beyond.

1.1 AIM AND OBJECTIVE OF THE DELIVERABLE

The deliverable D7.9 contains a key dissemination material for increasing the visibility of CAFIPLA both online and onsite. Based on the communication strategy described in “D7.1 Communication matrix”, which identified CAFIPLA stakeholders, the CAFIPLA Project video described in this deliverable was specifically designed to meet all stakeholders’ interests. For this, the video was compiled with a focus on introducing the CAFIPLA vision, goal and technology in a simple and entertaining way while also providing general information about the overall project context and global challenges the CAFIPLA partners are motivated by.

1.2 FURTHER USE OF THE VIDEO

The Project video will be distributed as a video file (.mp4) or a Youtube link streamed via the CAFIPLA website as advertising material promoting and explaining the CAFIPLA concept for general dissemination and communication purposes at all events with potential stakeholders.

To increase awareness about the project contents and attract stakeholder engagement, the video as a public deliverable will be published on the CAFIPLA project website¹, advertised via the CAFIPLA LinkedIn channel and disseminated via the YouTube channel, Twitter, and LinkedIn accounts as well as newsletters of DECHEMA. The DECHEMA YouTube channel has 363 subscribers who mainly belong to an expert biotechnology and chemistry community. The DECHEMA Twitter and LinkedIn accounts even reach 3558 and 7702 followers, respectively, of that same community. Additionally, the CAFIPLA Project video will serve all partners as an advertising material to be distributed through their own communication channels. In the following, the content and structure of the video are presented.

2 VIDEO CONTENT

2.1 GENERAL IDEA

The CAFIPLA Project video introduces the general CAFIPLA concept and sets it in context with current challenges both at global and technical levels. The video is designed to give a broad overview and entertaining introduction to the CAFIPLA vision, goal, and technology and to attract the attention of the interested public for this approach as well as raise awareness for the challenges the CAFIPLA partners work towards answering.

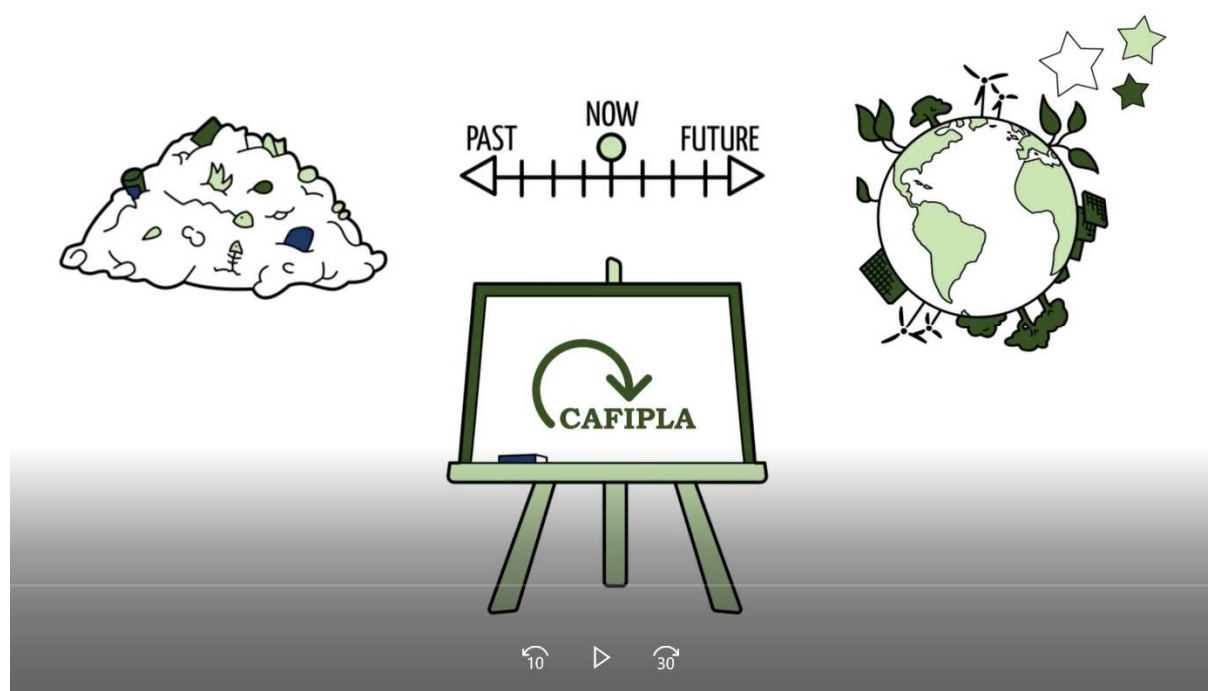


Figure 1: Intro slide of the Project video

2.2 TECHNICAL IMPLEMENTATION AND DESIGN

The video was designed and created using the Simpleshow Pro software. This online tool provides a great variety of scientific icons and images to illustrate the overall concept of a research project such as CAFIPLA. The length of the video was chosen to be approx. 3 min to explain the project in a slow and simple way while not losing the viewers' interest. The images were adjusted with the CAFIPLA colour scheme, setting light green (#CCECB7) as primary, dark green (#385723) as secondary and dark blue (#203864) as tertiary colour. The music "xylophone tune" supports the overall exciting but calm vibe of the video. The CAFIPLA logo was placed in the beginning and on the final slides of the video as well as included throughout the story linking the development of solutions to the CAFIPLA concept. The repeated use of the same icons and images when talking about general themes like "biowaste", "bioeconomy", "biorefineries", "bioproducts", "CAFIPLA technology", "Carboxylic acid Platform (CAP)" or "Fibre Recovery Platform (FRP)", helps to simplify the project concept and context and helps the viewer follow the storyline.

2.3 STRUCTURE

The video begins with bringing up the bigger picture of the climate crisis and the consequent challenges resulting from this. The CAFIPLA concept is then presented as part of the solution to establish a circular bioeconomy, in which industrial production will be based on biogenic resources. Following, biogenic residual and waste streams (“biowaste”) are introduced as an appropriate and cost-effective biogenic resource and current challenges of converting this underutilised but highly complex raw material into value-added products is highlighted.

The CAFIPLA project is then introduced with its goal to develop a strategy for the valorisation of heterogenous biogenic waste materials by combining mechanical and biochemical pre-treatment and separation steps: The Carboxylic Acid Platform (CAP) for carboxylic acid recovery and the Fibre Recovery Platform (FRP). The CAFIPLA process is explained in further detail to illustrate the separate steps for easy understanding of the overall procedure to turn waste into value-added bioproducts.

The following part focuses on the technologies CAP and FRP as well as the main end-products that can be obtained from the process. As examples bioplastics, fertilizer, and feed additives as well as fibre-based materials are presented in a visually appealing and entertaining way to attract the viewers’ attention and effectively convey the platform’s application potential.

After a short recap of the project’s aim to turn biowaste into valuable, environmentally friendly bioproducts the story leads back to the CAFIPLA vision introduced earlier. The question from the very beginning of the video “How can biowaste help to save the planet?” is eventually resumed and answered by suggesting that the CAFIPLA technology will help to tap into biogenic waste streams as new raw materials as the base for a future circular bioeconomy.

2.4 THE STORY

In the following, the CAFIPLA Project video text and the corresponding visuals are presented (figures 2-12):

“How can biowaste help to save the planet? Find out how the CAFIPLA project works towards this goal.

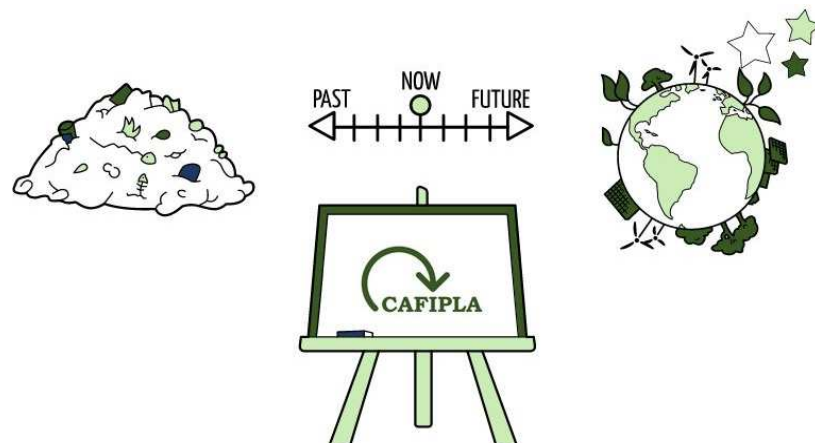


Figure 2: The introduction slide shows the key elements of the video.

Our world is facing a great challenge: the climate crisis is affecting our lives and predictions are alarming! We have to radically change the way we live, produce and consume. To transition from our fossil-based to a circular bioeconomy with net-zero emissions, we need to switch to bioresources.

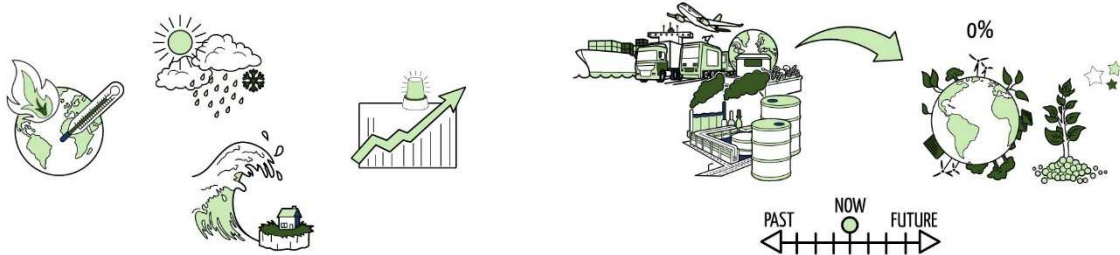


Figure 3: The big picture is explained.

This is where biowaste comes into play. Today, organic waste treatment plants produce biogas or compost. But biowaste could be so much more.

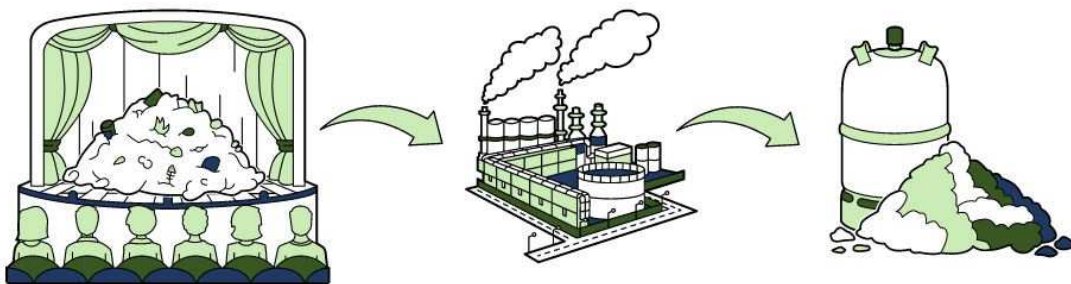


Figure 4: Biowaste is introduced.

There is only one problem – it's complexity. Biowaste is a very heterogeneous bulky resource with varying compositions. We simply need better ways to turn biowaste into valuable and sustainable bioproducts.

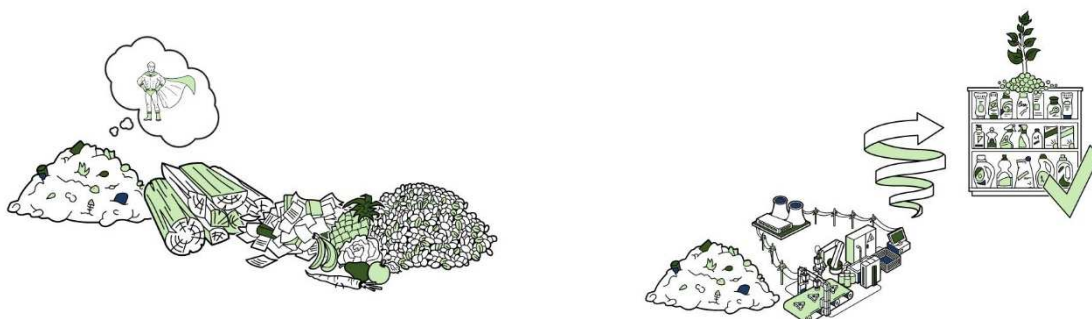


Figure 5: The biowaste problem is explained.

In the CAFIPLA project, 12 partners from six European countries joined forces to develop a breakthrough technology and fundamentally change the way we use biowaste today. The CAFIPLA vision is to turn conventional biogas plants into actual biorefineries. So, how do we get there?



Figure 6: The CAFIPLA project is introduced.

The CAFIPLA technology relies on the optimisation and combination of two platforms to convert heterogeneous biowaste into high-value products. Let's take a closer look at the process: Initially, the organic waste is separated into fibrous biomass and easily biodegradable biomass.

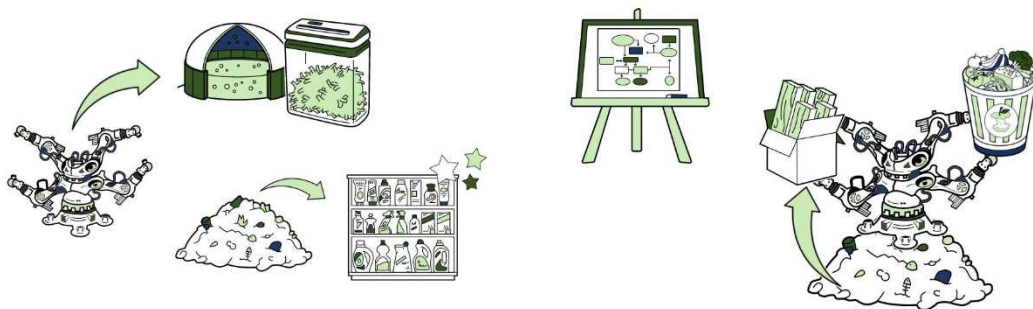


Figure 7: The CAFIPLA technology is introduced.

Within the Carboxylic Acid Platform (CAP), the easily biodegradable biomass is converted by microorganisms into carboxylic acids. These valuable intermediates serve as a basis for the production of bioproducts such as bio-plastics, feed additives or organic fertilizers.

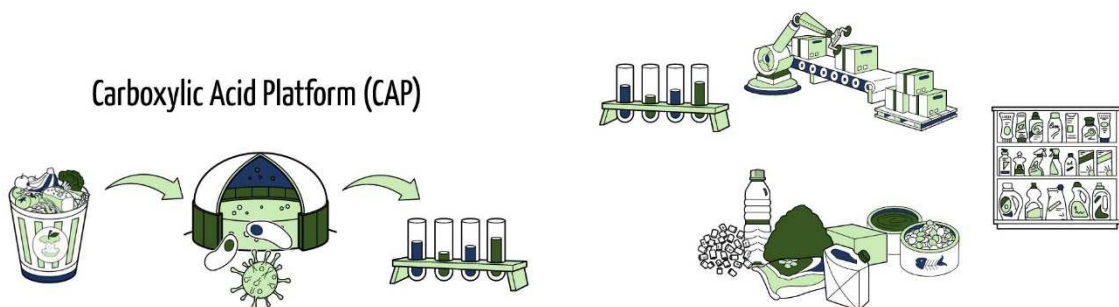


Figure 8: The Carboxylic Acid Platform (CAP) is explained.

The fibrous biomass is treated via the Fibre Recovery Platform (FRP) that enables the environmental-friendly recovery of natural fibres. Fibres obtained via the FRP process can be converted into novel bio-based composites and insulation materials for packing or filling purposes.

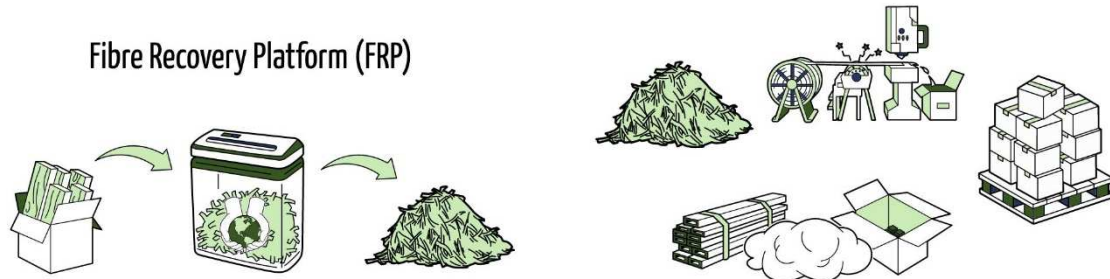


Figure 9: The Fibre Recovery Platform (FRP) is explained.

All remaining biomass not valorised via the CAFIPLA process will be returned to the conventional biowaste treatment route and converted to compost or biogas.

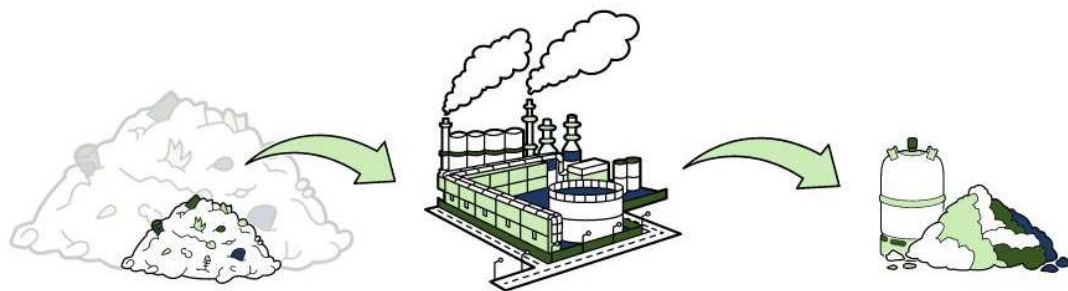


Figure 10: The link to conventional biowaste treatment is explained.

We now learned how the innovative CAFIPLA technology can be used to produce new materials and valuable biobased products from biowaste. CAFIPLA biorefineries could become the key players to transform our linear production system into a fully circular bioeconomy in harmony with the planetary boundaries.



Figure 11: Summary and outlook are given.

If you want to know more details about CAFIPLA, come visit us on our website or follow us on LinkedIn to not miss the regular project news and updates.



Figure 12: The final slides present the CAFIPLA channels and options to follow the project.

The video is available on Youtube at: <https://www.youtube.com/watch?v=PJQGcn-mA2A>

3 CONCLUSIONS

The project video serves as part of the dissemination portfolio aiming to attract the stakeholders' attention to the CAFIPLA project and technologies. A broad range of stakeholders will be targeted ranging from the general public, consumer organisations, media, researchers and academics, policy makers, other BBI/CBE projects, BIC and BBI consortia members to biowaste processors, producers and biogas plant owners. The video will ultimately contribute to the success of the project by helping to pave the way towards implementation of the developed technology platform. As a public deliverable, the video will be published on the CAFIPLA project website and advertised via social media. Furthermore, it will serve the main purpose as a promotional material for the CAFIPLA partners to be distributed online through their communication channels on all future opportunities.

4 REFERENCES

CAFIPLA – D7.1 (2020), Deliverable D7.1 Communication matrix, August 2020.