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BIO-MeGaFuel

Bio Methanol Production via Chemical Looping Gasification Coupled with Membrane Reactors

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WP5 – Exploitation, Dissemination and Communication

D5.8 Dissemination video

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Dissemination Level	
PU	Public X
SEN	Sensitive, limited under the conditions of the Grant Agreement



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WP5
D5.8 Dissemination
video

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1. Executive summary

1.1. Description of the deliverable content and purpose

The Bio-MeGaFuel project video (D5.8) is a promotional video, developed as part of T5.6, as a dissemination and communication tool.

The aim of this video is to create widespread awareness of the Bio-MeGaFuel project and its results amongst stakeholders. To support this aim, the specific goals of the video are to:

- showcase the project to the general public;
- demonstrate the efficient and scalable process to convert low-value biogenic residues and organic waste to biomethanol with a minimum carbon footprint compared to conventional methods.

The video will be distribute through our channels (project website, video hosting sites and social media). in addition, the video will be distributed at events, conferences and workshops to further promote the Bio-MeGaFuel project.

This will facilitate the effective communication of the project's aims and impact with all stakeholders, and in particular the scientific and general public audience.



2. Video Development

2.1 Script and video development

In order to establish the overall direction for the video and provide guidance to suppliers, a script of the video was written by the coordinator at RISE.

Figure 1 presents a screenshot of the script of the video for the project.

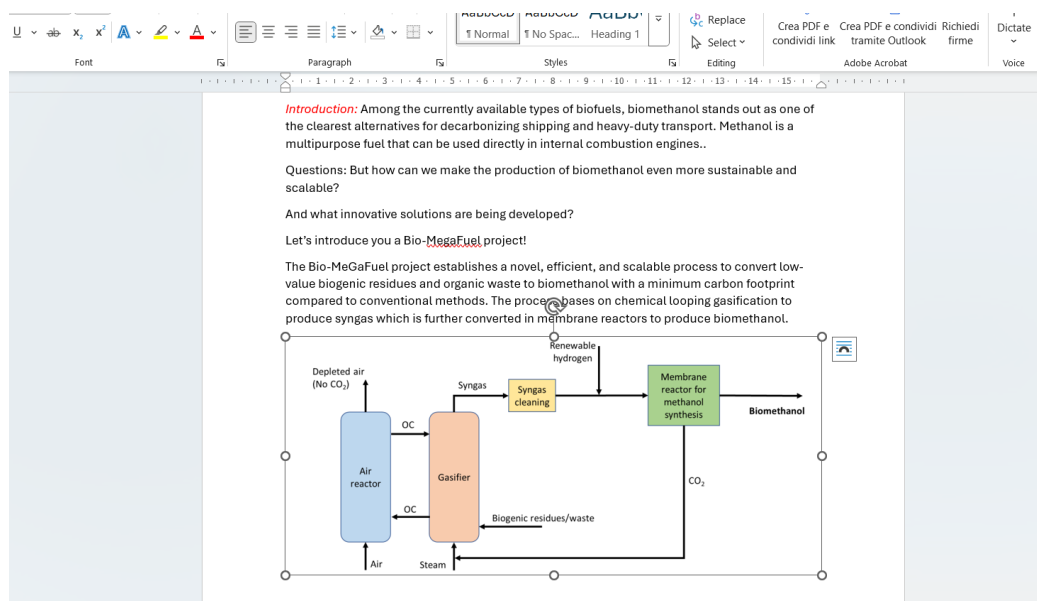


Figure 1 Screenshot of the script of the video.

After the script had been refined further, 1CUBE started worked on the video using CANVA software to set up, analyse and chose the best scenes, text, images and animation for creating the Bio-MeGaFuel video. Later, also music and voices have been added to the video.

The first version of the video was sent to the Bio-MeGaFuel WP partner for review and receiving comments before the finalisation, above all to ensure the objectives of the video were met and that the information being communicated was accessible for different public and scientific audience.

Feedbacks from the partners were taken on board and the final video was ready to be published and disseminated in different channels and social media.

2.2 Description of the video

The final video is 3 minutes and 02 seconds long. It involves 48 distinct scenes that starts with a statement of relevance, highlighting the importance of biomethanol in decarbonizing transport.

The video introduces the fact that among different available types of biofuels, biomethanol stands out as one of the clearest alternatives for decarbonizing shipping and heavy-duty transport and continues indicating that several challenges hinder the wider adoption of methanol in energy systems:

- Strong global demand for methanol in the chemical industry, limiting its availability for energy sector
- Methanol has been produced primarily from fossil resources



- The production of biomethanol significantly reduces greenhouse gas emissions, making biomethanol a promising fuel for decarbonizing hard-to-abate sectors.

In Figure 2 shows the screenshot of the scenes used for describing those challenges.

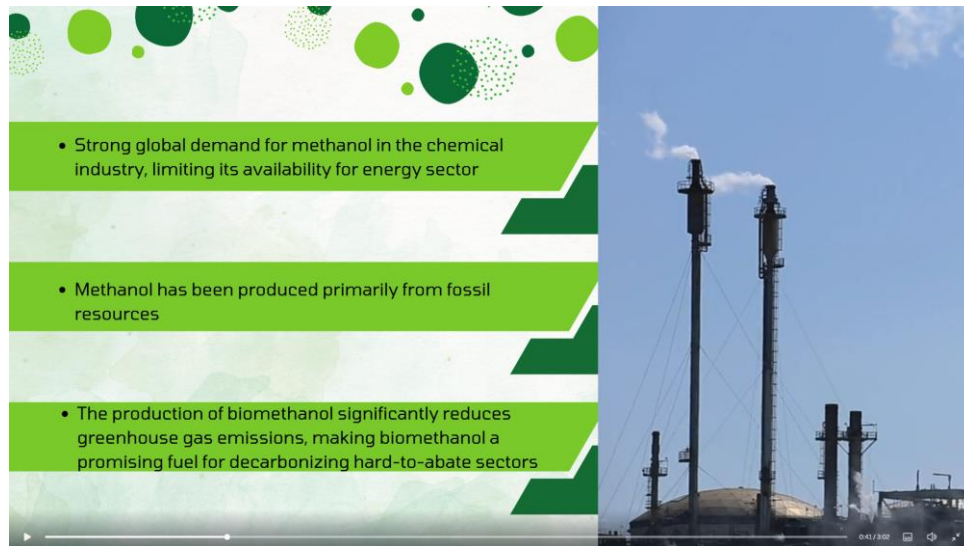


Figure 2. Screenshot of the challenges of wider adoption of methanol in energy sector.

Then, it smoothly transitions into open-ended questions that invite curiosity and signal the direction of the discussion.

The video continues addressing the challenges by enhancing production capacity and reducing production cost of biomethanol, that is achieved through:

- process integration,
- process intensification,
- enhanced conversion efficiency,
- utilization of low-value biogenic residues and wastes.

Figure 3 presents the screenshot of the approaches in Bio-MeGaFuel to address the challenges for wider adoption of methanol in energy sector.



Figure 3 Screenshot of the approaches for in Bio-MeGaFuel to reduce cost of biomethanol for wider adoption in energy sector.


The second part of the video is the introduction of our Bio-MeGaFuel project with the following key specific objectives:

- developing gasification with oxygen carriers to maximize conversion of biogenic residues and wastes to syngas;
- developing of membrane reactors for methanol synthesis;
- developing single-step methanol synthesis with recirculation of CO₂ to maximize carbon and biomass conversion;
- exploitation and analysis of whole value chain from low-value biogenic residues and wastes to biomethanol;
- dissemination and communication of the project's results to pay a way for commercial interest.

Figure 4 presents the objectives of Bio-MeGaFuel project.



Figure 4. Screenshot of the objectives of Bio-MeGaFuel project

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Then, the video gives a general description of the Consortium of the Bio-MeGaFuel project, that consists of nine partners from five countries and includes:

- 3 Research Institutes: Rise Research Institutes of Sweden, IVL Swedish Environmental Research Institute, The Spanish National Research Council (CSIC),
- 2 Universities: The Technical University of Darmstadt, Eindhoven University of Technology (TU/e),
- 4 Companies: GIDARA Energy, Perpetual Next, 1Cube, Blue World Technologies,

Figure 5 reports the screenshot of the consortium partner of the project.



Figure 5 Screenshot of the Consortium

Last, but not least, part of the video is dedicated to thanking the CINEA (European Climate, Infrastructure and Environment Executive Agency) for supporting our project.

Figure 6 reports the screenshot to thank the European Commission.

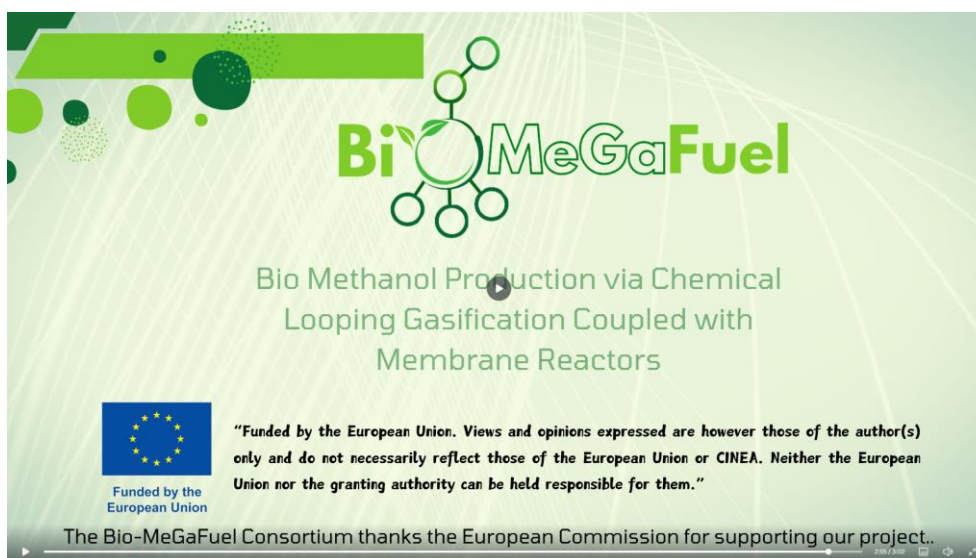


Figure 6. Screenshot of the acknowledgments to the European Union.

Finally, in the last slide, people are invited to follow updates and developments of the project on our social media channels, also scanning a QR code of the Bio-MeGaFuel website.

3. Dissemination of the video

The video was finalised on February 27th, 2025, and is publicly available on the Bio-MeGaFuel project website.

A news piece to accompany the launch of the video was also added to the website and to the LinkedIn page of Bio-MeGaFuel project.

Moreover, the video has been added to YouTube and Facebook of 1CUBE account to reach different kind of audience.

The video was distributed to all project partners and 1CUBE asked to share the video with their personal networks and on their institution's social media channels.

Moreover, the video can be downloaded in the Bio-MeGaFuel website and can be used in any conferences, events and public presentation.