



ETIP *Bioenergy*
European Technology and Innovation Platform

Online Proceedings of 1. Stakeholder Plenary Meeting

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Online Proceedings of 1. Stakeholder Plenary Meeting

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Contacts –

BEST – Bioenergy and Sustainable Technologies
dina.bacovsky@best-research.eu

PROJECT PARTNERS






<p>BEST - Bioenergy and Sustainable Technologies GMBH, Austria</p>	
<p>RISE – Research Institutes of Sweden AB, Sweden</p>	
<p>EUREC – European Renewable Energy Research Centre</p>	
<p>ETA – Energia, Trasporti, Agricoltura Srl, Italy</p>	
<p>CSD – Center For The Study Of Democracy, Bulgaria</p>	

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Executive summary



The screenshot shows the ETIP Bioenergy website homepage. At the top left is the ETIP Bioenergy logo. To the right are links for 'ABOUT US' and 'CONTACT', and social media icons for Twitter, LinkedIn, and Facebook. A navigation bar below the logo contains links for 'HOME', 'VALUE CHAINS', 'MARKETS & POLICIES', 'SUSTAINABILITY', and 'SUPPORTING INITIATIVES AND PLATFORMS', along with a search bar. The main content area features a large banner for the '11th Stakeholder Plenary Meeting' on 27-28 September 2023, with a 'Resources available' callout. To the right of the banner are four colored boxes: 'ADVANCED BIOENERGY' (teal), 'GET INVOLVED' (orange), 'STAKEHOLDERS' (green), and 'BIOENERGY POSITION PAPERS & REPORTS' (light green). Below the banner are three smaller boxes: 'Supporting the implementation of the SET-PLAN' with the SET4BIO logo, 'STRATEGIC RESEARCH & INNOVATION AGENDA 2023', and 'ETIP-B2022-2025 PROJECT'.

European Technology and Innovation Platform Bioenergy

11th Stakeholder Plenary Meeting

27-28 September 2023

Brussels, Belgium

Accelerating towards the 2030 targets

The **11th Stakeholder Plenary Meeting of the ETIP Bioenergy** has proven to be a unique forum for the **bioenergy and renewable fuels community** in Europe. After the previous online edition in 2021 - and the last one held in-person in 2018 - the return to a **physical meeting in Brussels** at the premises of the European Commission (Directorate-General for Research and Development, DG RTD) set the scene for a wide showcase of prominent initiatives and actors, enabling knowledge sharing and synergies among them. About 80 stakeholders across policy, industry, and

R&D sectors joined the event and engaged in stimulating discussions on main developments, emerging technologies and crucial topics in the bioenergy and renewable fuels field.

This edition focused on the measures for accelerating the energy transition towards the 2030 targets. It was complemented by a workshop for experts on European citizens' visions of bioenergy, led by Center for the Study of Democracy (CSD).

The event covered two days and was structured around four prominent dimensions of the bioenergy and renewable fuels sector. The European policy landscape, the role of industry, and the Research and Innovation field were addressed in respective sessions. A new relevant focus was introduced on the societal topics concerning the energy transition, with a whole session dedicated to the **social acceptance of bioenergy**, which was further discussed in the expert workshop.

Bioenergy is confirmed to be a key asset to foster a sustainable and secure energy system in Europe and beyond. It holds a strategic role in the industry decarbonisation pathway, and in the mitigation of climate change. Framed into the wider scope of a bio-based economy, *«bioenergy implemented through sustainable practices can contribute to optimize the management of bio-resources, not only making GHG emissions level decrease but also protecting and even improving biodiversity»* claimed Dina Bacovsky (IEA Bioenergy). The EU policy and industry framework concerning climate and energy shows positive advancements over the last 2 years, as illustrated by Maria Georgiadou, Senior Expert at DG Research and Innovation (RTD): the measures of the Fitfor55 package, the REPowerEU Plan, the EU Net-Zero Industry Act are shaping a promising environment for the boost of bioenergy and renewable fuels in the European industry. However, securing the biomass availability is the key for the uptake of bioenergy in Europe over the upcoming years. Future perspectives into the sector suggest that flexible and universally applicable value-chains, able to function with various raw materials and existing infrastructure, will be preferred. In terms of feedstock provision, *«locally sourced biomass will be preferred as perceived as more reliable to secure the domestic energy supply»* declared Patrik Klintbom, Chair of ETIP Bioenergy and Senior Researcher at RISE.

The European Industry is making great strides in the deployment and commercialization of advanced technologies for different applications. The Industry Panel envisaged several leading companies presenting their activity and their effort aimed to unlock the market potential of bioenergy and renewable fuels. Industrial deployment encompasses a wide range of feedstocks, processes and products, such as: the fast pyrolysis bio-oil obtained from sustainable biomass residues by the Biomass Technology Group (BTG), the BioTfuel® technology suite by Axens providing renewable diesel and SAF from non-food biomass feedstock, the WoodRoll® biorefinery technology based on biomass gasification deployed by Cortus Energy, the sunliquid® technology by Clariant for cellulosic ethanol production obtained from the conversion of a broad range of lignocellulosic feedstock. This industry session was animated by a final panel discussion on end-use aspects led by Philippe Marchand, Chair of ETIP Bioenergy Working Group 3 (End use), focused on the aviation and shipping sector.

The Research and Innovation Panel was marked by the presentation of the **updated Strategic Research and Innovation Agenda**, freshly released by ETIP Bioenergy (full read available here). The SRIA 2023 aims to identify important activities and focus areas that need to be considered in future research and innovation of the bioenergy and biofuels field, for enabling the value chains to reach their full market potential. *«Biofuels and renewable fuels of non-biological origin should replace fossil energy consumed in the vehicle fleet, and in market segments which are not suitable for electrification or the direct use of hydrogen»* - concluded Patrik Klintbom - *«Promoting*

renewable fuels does not mean competing against the electrification of transport, but rather supporting the phase-out of fossil fuel consumption».

Five European R&I projects dealing with emerging technologies presented their concept and main results. The clustering topics were **biomethane** production – the focus of SEMPRES-BIO and BIOMETHAVERSE projects – and **aviation and shipping fuels** production – addressed respectively in CIRCULAIR, REFOLUTION and CARBIOW projects.

«I am impressed by such a high level of knowledge and debate brought forward in this forum, both from the research and industry side» commented a satisfied Maria Georgiadou during the event.

Improving the social acceptance of bioenergy technologies across European citizens is a key enabling factor, which was addressed in depth within the final session of the event. As raised by Radan Kanev, Member of European Parliament, a high share of the public opinion across European countries believes that bioenergy is unsustainable. Indeed, common misconceptions and unfavourable opinions about bioenergy in the general public are frequently underpinned by negative perceptions and feelings associated to the sector. This is something that all the stakeholders at policy, research and industry level must address in their outreach strategy, not only claiming the science-based evidence of their action. *«Even if you provide all the facts, you still do not address the emotional concerns»* wisely stated Patricia Osseweijer, Professor at TU Delft and expert of societal challenges connected to technological innovation. The discussion was joined by Enrico Bocci, Professor at Marconi University, and Thomas Schleker, Senior Expert at DG RTD; the experts panel agreed on the urgency to eradicate the common perception that bioenergy is harming natural resources, and to commit for a transparent communication that can **reinforce the public trust towards the bioenergy sector**. The **citizens visions** collected across Europe and presented by CSD is an example initiative for raising awareness, fostering constructive debate and nurture the relationship between technological development and society.

«Bioenergy and biomass are complex issues, and we are committed to share knowledge. It is important to convey the social and environmental side of bioenergy, that is it can create job opportunities and increase biodiversity in our ecosystems» said Patrik Klintbom in the closing speech. Maria Georgiadou agreed and reinforced the message: *«Sustainable implementation of bioenergy is a matter of morality. Supporting communities in living sustainably must be an ethical principle driving the action of the European Union».*



AGENDA

[Download pdf version of the Agenda by clicking here](#)

DAY 1

27 September 2023

Time	Topic	Speaker
13:00	<p>Introductory Session Political view on bioenergy, talk about recent developments, discuss the latest EU regulation and present how ETIP Bioenergy is supporting our industry.</p>	<p>Moderation: Patrik Klintbom, Chair of ETIP Bioenergy</p>
	<p> The Strategic Role of Bioenergy</p>	<p>Dina Bacovsky, IEA Bioenergy</p>
	<p> The EU framework and perspectives</p>	<p>Maria Georgiadou, DG RTD</p>
	<p> ETIP Bioenergy - support to a stronger bioenergy industry</p>	<p>Patrik Klintbom, Chair of ETIP Bioenergy / RISE - Research Institute of Sweden</p>
14:15	Coffee Break	
15:00	<p>Industry Panel: Ready for Deployment Leading companies highlight what they do and assess what is needed to unlock the market potential of bioenergy and renewable fuels.</p>	<p>Moderation: Dina Bacovsky, Chair of ETIP Bioenergy WG2 (Conversion)</p>
	<p> How to deploy BTGs technology for producing fast pyrolysis bio-oil from biomass residues</p>	<p>René Venendaal, BTG</p>
	<p> How to deploy the Axens BioTfuel technology suite for renewable diesel and SAF production</p>	<p>Nicolas Simon, Axens</p>
	<p> How to deploy Cortus technology of gasification of pyrolysis oil</p>	<p>Rolf Ljunggren, Cortus Energy</p>


[How to deploy Clariant’s cellulosic ethanol technology](#)

 Nikolas Jacobsen,
Clariant

How to deploy LanzaTech’s technology for ethanol and ATJ production

 Freya Burton, **LanzaTech**

Technical break

Panel discussion on end-use aspects

 Moderator: **Philippe Marchand**, Chair of ETIP Bioenergy WG3 (End use)

Panellists:

Rolf Willkrans, Volvo

René Venendaal, BTG


[Valentin Batteiger, Bauhaus Luftfahrt](#)

[Felipe Ferrari, GoodFuels](#)

17:30

End of day

DAY 2





28 September 2023

Time	Topic	Speaker
09:00	R&I Panel Next generation technologies and R&I needs.	Moderation: Patrik Klintbom, Chair of ETIP Bioenergy
	 Strategic Research and Innovation Agenda (SRIA) 2023	Patrik Klintbom, ETIP-B2022-2025 Project
	 SempreBio	Eric Sunol, SempreBio Project
	 Biomethaverse	Gabriella Papa, Biomethaverse Project
	 Horizon Europe CIRCULAIR: Jet fuel from hydrothermal liquefaction of abundant agricultural residues	Valentin Batteiger, CIRCULAIR project


[REFOLUTION Project - Unlocking the potential of biofuels](#)
Duncan Akporiaye,
 REFOLUTION project


[CARBIOW](#)
Margarita de Gregorio,
 CARBIOW project

10:30 Coffee Break

11:15	Social acceptance of bioenergy Insights into citizens views and discuss them with selected stakeholders.	Moderation: Konstantsa Rangelova , Center for the Study of Democracy (CSD)
	Opening	Konstantsa Rangelova , Center for the Study of Democracy (CSD)
	Keynote	Radan Kanev , Member of European Parliament
	 Social acceptance of bioenergy - lessons learned from Austria, Bulgaria, Italy and Sweden	Konstantsa Rangelova , Center for the Study of Democracy (CSD)
	Good practices in improving social acceptance in new energy technologies and the future of RES in the context of EU's decarbonisation targets	Prof. Patricia Osseweijer , Leader of Section Biotechnology and Society, Delft University of Technology (TU Delft)
	 Patricia Osseweijer, TU Delft	Enrico Bocci , Mech. Eng. Ph.D. Associate Professor on Energy Systems, DSI & CERITED Department, Marconi University
	 Enrico Bocci, Marconi University	Thomas Schleker , Policy Officer, DG RTD, European Commission
	 Thomas Schleker, DG RTD, European Commission	
	Discussion	
12:45	Light Lunch	