ONLINE BIOECONOMY YOUTH DEBATE #2

Communicating the sustainability vision with the bioeconomy




Event Report

ORGANISER

Q-PLAN INTERNATIONAL

In collaboration with the European Commission

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Outcomes and Recommendations

Miro Board outcomes on Topic 2.1

Topic 2.1 Questions	Participants answers
1. How can we use community resources to spread awareness and change perceptions in environmental efforts?	**Educators & Multipliers communities** - Workshops/ conferences - Teachers and educators' trainings to multiply the bioeconomy to as many students as possible - Bioeconomy Curriculum Integration: accessible lesson plans and toolkits development for teachers that highlight bioeconomy principles in subjects like biology, chemistry, and economics, fostering a culture of sustainability from an early age. - Incubators and accelerators for sustainable products mobilise the financial system mobilisation to fund environmental projects - Teachers' networks establishment to share resources and best practices. **Citizens** - Small-scale environmental projects, enabling them to act in their neighbourhoods. e.g. urban gardens in public spaces - Share Community- Based Success Stories - Citizen Science Projects: community members participation encouragement in data-gathering projects, like tracking local pollution levels or biodiversity changes, that illustrate the bioeconomy's impact and engage citizens in the scientific process. - Religious / spiritual communities' recruitment. **Events & Activities organisation communities** - Art exhibitions around bioeconomy / circularity. - Hands-on experience and visible local impact. - Demonstration of biomaterials use in everyday life - Local vendors in sustainability fairs. - Host Community Clean-Up Days e.g. in neighbourhoods, urban seafronts etc. **Youth communities** - Call to action to make viral contents on social media - Eco-Hackathons: Host workshops or hackathons for youth to develop innovative bioeconomy solutions. Such events could address local environmental issues, encouraging young participants to ideate sustainable projects that utilise local resources.

2. How can we better understand product life cycles and reduce waste using hands-on experimentation with Eco-friendly materials? Give examples on how to achieve:	**Deeper Material Awareness** - 3D-printing components with biodegradable PLA (Polylactic Acid) instead of traditional plastics provides insights into renewability, mechanical strength, and end- of-life behaviour. - Product Comparison Labs: Set up sessions where participants compare eco-friendly materials with traditional ones, such as plastic vs. biodegradable alternatives, to assess their impact on the environment. This can deepen understanding of which materials are more sustainable based on factors like production energy requirements and resource usage. - Conduct workshops where participants handle various eco-friendly materials such as bioplastics and learn about their properties. - Material Exploration Kits: Create kits with various eco-friendly materials (like bamboo, bioplastics, recycled paper, mycelium-based products) for users to touch, examine, and test. These kits can include instructions for experiments that show each material's unique properties, like durability, flexibility, and natural textures. **Understanding Degradation and End-of-Life** - Composting Experiments: Have participants bury eco-friendly materials in soil or add them to compost bins, monitoring and documenting their degradation over weeks or months. This shows how different materials break down (or don't), creating a tangible understanding of end- of- life impacts. - Degradation Time-Lapse Studies: Create controlled degradation time-lapse studies where different bio-based and synthetic materials are exposed to elements (water, sunlight, soil). Tracking the process with photos or videos helps visualise the speed and effects of degradation, linking it to environmental consequences. **Value of Reusability**

	- Kids Engagement: communicate through experiential immersive learning experiences so that can convey the circular thinking perspective to their families. **Circular Design Thinking** - Designing with End-of- Life in Mind: Host design sessions where participants create products with eco-friendly materials and plan for them entire life cycle from production to end-of- life. This could involve choosing materials that can be easily recycled or composted and minimizing the use of non-bio-degradable elements. - Circular Product Prototyping: Challenge participants to create prototypes of everyday products (e.g., packaging, household items) with a focus on circular principles—designing items that are modular, easy to disassemble, or made entirely from biodegradable materials. This process fosters innovation around minimising waste through design.
3. What social media platforms or communication channels are most effective for reaching youth with bioeconomy messages?	TikTok: 10 votes Instagram & Podcasts (e.g. Spotify, Apple Music etc.): 6 votes YouTube: 4 votes LinkedIn, Facebook & X: 2 votes

Miro Board outcomes on Topic 2.2

Topic 2.2 Questions	Participants answers
1. How and by what means natural materials used in art can help us rethink the environmental impact?	**Painting** - Biodegradable Canvases - Natural pigments from sources like plants, minerals, and soil. **Performing Arts** - Eco-conscious set design and costumes. - Using natural environments as the 'stage'. - Dance performances/embodied practices that engage communities and communicating the importance of the environment. - Environmental Storytelling Through Performances: Performing arts can tell stories that highlight bioeconomy principles. -Music with bio-based and natural instruments. **Visual & Digital Arts** - Fiber arts, also connects to traditional crafts and Indigenous knowledge e.g. felt, wool, weaving, etc. - Photography about bio-based materials (e.g. Bio-Art Gallery). **Sculpture & Installation** - Installations that gradually degrade or change during the exhibition time using materials like moss, soil, or mycelium, to understand temporality and how not to leave a footprint. - 3D printed sculptures using bio-based material. **Fashion & Textiles** - Fashion shows with sustainable themes - Natural dyeing techniques from flowers, vegetables, or herbs - Use of recycled materials from and for textiles in a "provocative" way **Architecture** - Biomimicry in Design: designs inspired by nature's forms and functions—> offer viable alternatives to concrete and steel. - Not only bio-inspired architecture, but actual integration of nature through biomaterials. - Cities to be turned into supporters of the biodiversity.

2. How could hands-on-practice make us shift from consumers to active creators?	**Practical skills** - Learn how to fabricate materials from scratch - Biobased fabrication, then broaden the culture of reused materials - Learn how to fix items - like sewing clothes, repairing electronics, or refurbishing furniture - Resource Value understanding **Mindset shift** - Critical Thinking and Problem-Solving: Hands- on practice requires adapting materials and resources to meet specific needs, fostering a problem-solving mindset that values innovation and resilience. - Circular Economy Thinking: Engaging in the creation process cultivates a circular mindset, where creators consider how materials can be reused or repurposed, thus reducing waste. - Mind quality rather than quantity **Hands-on-practice examples** - Eco-Friendly Product Design Workshops: Providing sessions to design biodegradable products. - DIY Repair and Upcycling Workshops - Bring bioeconomy closer to the communities engaging also, non-professionals but the communities at large without any previous knowledge
3. What aspects of nature inspire you the most when thinking about design?	- Shapes & Forms: 9 votes - Patterns & Textures: 7 votes - Colours: 5 votes - Materials: 3 votes - Movement and Growth/Evolution: 2 votes

Key Insights stemming from the discussions

Young communicators have significant potential to advocate for the bioeconomy by leveraging their digital fluency and creative storytelling skills. Platforms like TikTok, Instagram, and YouTube allow them to craft engaging, viral content to highlight the benefits of sustainable practices. Eco-hackathons and hands-on workshops can further empower them to develop innovative solutions and share real-life applications of the bioeconomy, bridging the gap between abstract concepts and tangible actions. However, effective advocacy also requires critical thinking and fact-checking skills to ensure accurate and impactful communication, especially in an era where misinformation spreads easily.

To inspire action, young influencers can focus on community engagement. Initiatives like urban gardening projects, citizen science efforts, and sustainability fairs provide relatable examples of how the bioeconomy improves daily life. Hosting events such as clean-up days or bioeconomy-themed art exhibitions can showcase the bioeconomy's relevance while fostering a sense of community. Positive messaging, combined with stories of local success, is key to shifting perceptions and encouraging sustainable behaviours. By adopting tailored communication styles and creating visually appealing content, young advocates can connect with diverse audiences and make the bioeconomy a central part of sustainability conversations.

Art and culture serve as powerful tools to inspire youth and ignite passion for the bioeconomy by blending creativity with sustainability. Natural materials like plant-based pigments, biodegradable canvases, and bio-based fibres allow young artists to create works that not only express environmental values but also embody them. Initiatives such as bio-art installations, 3D-printed sculptures using bio-based materials, and sustainable fashion shows present innovative ways to explore the bioeconomy creatively. These practices link traditional art forms with modern sustainability challenges, fostering a deeper appreciation for circular principles and resource-conscious living.

Spaces like makerspaces and fab labs offer young people opportunities to experiment with bio-based materials and craft circular products, turning creative expression into practical advocacy. By integrating biomimicry and nature-inspired design into architecture and everyday creations, youth can reimagine urban spaces as hubs of sustainability and community engagement. Events like sustainability fairs or bioeconomy-themed competitions provide platforms for showcasing these creations while encouraging dialogue on the role of art in driving environmental change. Through artistic expression, the bioeconomy becomes more relatable, allowing youth to connect with its principles on a personal and cultural level.