

WORLD BIOECONOMY FORUM GOES TO THE USA – LIVE FROM WASHINGTON D.C.!

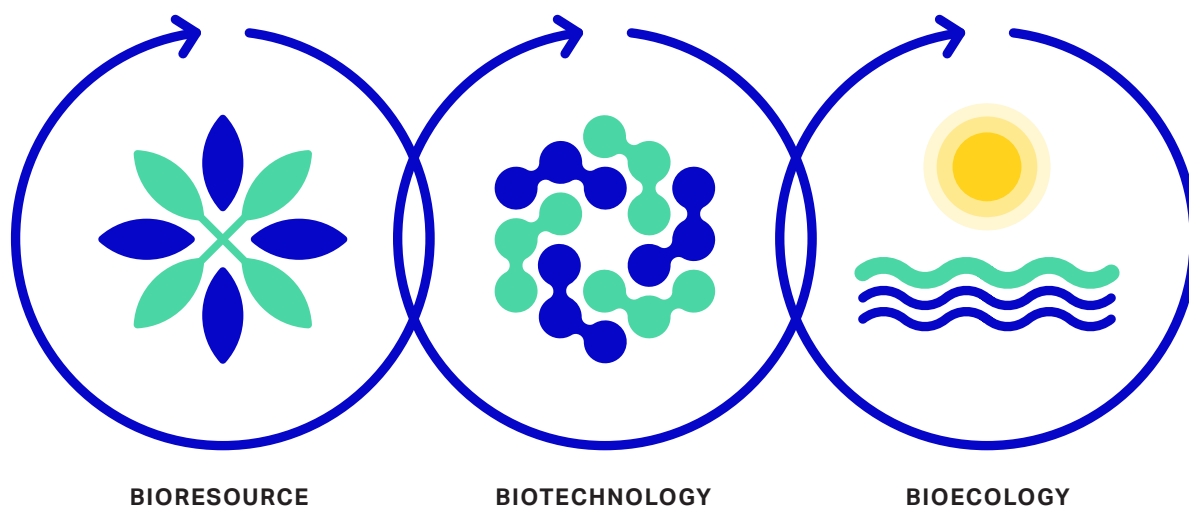
Creating a global hub for the bioeconomy

ON 12 DECEMBER 2023 – HYBRID EVENT



WORLD
bioeconomy
FORUM

The circular bioeconomy is a multisectoral concept, embraced by the three visions



A BIORESOURCE VISION, focusing on the role of research, technology development and upscaling, needed for conversion and value-chain-valorisation of biomass feed stocks, from agriculture, marine, and forestry sectors

A BIOTECHNOLOGY VISION, emphasising the importance of biotechnology- and biomanufacturing research, for application and commercialisation in different sectors.

A BIOECOLOGY VISION, highlighting the importance of ecological processes that optimise the use of land, energy and nutrients, giving space for promoting biodiversity, strengthen crop plants by out-phasing pesticides and protect soil quality against degradation. While the previous two visions are technology-focused and give a central role to RD & D in globalised systems, this vision emphasises the potential for regionally concentrated circular and integrated processes and systems.

In collaboration with



Ministry of Economic Affairs
and Employment of Finland



Ministry of Agriculture
and Forestry of Finland



Embassy of Finland
Washington D.C.

**BUSINESS
FINLAND**

Dear Esteemed Participants and Partners,

IT IS WITH GREAT PLEASURE and anticipation that I extend a heartfelt welcome to the sixth World BioEconomy Forum, a momentous occasion uniting experts and visionaries in the ever-evolving landscape of the bioeconomy. This year marks a significant milestone as the Forum unfolds its proceedings in the vibrant capital of the United States – Washington D.C.!

SCHEDULED FOR DECEMBER 12, 2023, at the esteemed Embassy of Finland, this hybrid event promises to illuminate the latest global trends and initiatives propelling the bioeconomy forward. The bioeconomy, now more than ever, stands not only as a solution to humanity's challenges but as a fundamental pillar of the global economy. Together with biotechnology, it heralds the 'bio revolution,' a transformative wave leading the charge in the Fourth Industrial Revolution.

STRUCTURED AROUND FOUR PILLARS, the program encapsulates the essence of the Bioeconomy in 2023. 'The BioEconomy: People, Planet, Policies' will delve into the regulatory landscape, exploring its intersections with climate change. 'Corporate Leaders and the Financial World' will spotlight the economic value of the bioeconomy, emphasising the potential of circular bioeconomy programs.

TAKING CENTER STAGE, 'Bioproducts Around Us' will shine a light on digital-aided biotechnology and bioresource-based value chains. Recognizing the multifaceted roles of bioresources, we aim to unravel their significance. The final pillar, 'Looking to the Future,' aligns with this year's theme, 'Creating a Global Hub for the Bioeconomy.' Here, we will unveil the results of the global survey launched earlier this year, offering insights into ongoing initiatives within the bioeconomy.

IN NAVIGATING this rich and diverse landscape, the Forum will present a status update on the global bioeconomy, exploring varied visions from different



regions and sectors. From biotechnology to bioresources and bioecology, we aim to showcase the breadth of approaches and learnings we can glean from these diverse perspectives.

THE FORUM WILL culminate in the annual Declaration, encapsulating the spirit of Bioeconomy Year 2023.

I EXTEND A WARM INVITATION to each of you to join us in this unmissable event, as we collectively explore, discuss, and propel the bioeconomy into a sustainable and prosperous future.

Warm regards,

Jukka Kantola
Founder,
World BioEconomy Forum

Welcome to the World BioEconomy Forum 2023

This year's forum will focus on the latest global trends in bioeconomy and highlighting the dynamic initiatives of both the USA and Finland.

Finland has developed its bioeconomy for centuries, in particular forestry industry. Hundreds of years of expertise has made Finland a global leader in sustainable forestry. Finland is also a pioneer in the development of bio-based materials, using for example wood and other renewable resources to create sustainable alternatives to fossil fuel-based products.

I am pleased to witness, that over the past year, there have been significant policy advances related to the United States biotechnologies and biomanufacturing. United States government is looking how to support this promising sector in the best way.

That is why it is so important that we have gathered to discuss the identified opportunities related to the future of bioeconomy. The momentum for further actions is now in our hands.

I encourage all participants to engage actively in the discussions. I am confident that the insights and perspectives shared during this seminar will contribute significantly to our understanding of the future of bioeconomy. Discussions held within this forum are not merely academic exercises – they serve as catalysts for action.



Thank you for your participation in the World BioEconomy Forum 2023. I wish you a productive and enriching experience.

Mikko Hautala
Ambassador of Finland
to the United States

Distinguished participants of the World BioEconomy Forum!

I am very pleased to be able to convey greetings from the Ministry of Economic Affairs and Employment to the World BioEconomy Forum.

The increasing global tensions we have seen in recent years have made it clear that we have to make better use of renewable resources to achieve an economic green transition. Bio-based biomaterials are key enablers of the green transition of many critical industries, products and services such as chemicals, batteries, textiles, construction, packaging and mobility.

Both Finland and the United States have taken into account the growing importance of bioeconomy. Finland's Bioeconomy Strategy aims to double the value added of the bioeconomy by 2035. One of the bioeconomy's key strengths is the ability to make sustainable and efficient use of raw materials, including side streams, in the production of high value added products and chemicals.

This is the sixth time that the World BioEconomy Forum brings together bioeconomy actors from all over the world. This is a great possibility to learn from each other and build global networks.



I wish you a fruitful Forum and interesting new insights as take away.

Timo Jaatinen

Permanent Secretary,
Ministry of Economic Affairs and
Employment of Finland

Dear participant of the World BioEconomy Forum 2023

Thank you for joining the discussion on the future of bioeconomy. The opportunities offered by a sustainable bioeconomy are endless, which is particularly prominent in this year's Forum. The bioeconomy contributes to the green transition by providing biotechnological solutions for food, feed and materials and by providing new bio-based materials. It also has synergies with the hydrogen economy.

Building competence on locally available renewable resources promotes comprehensive security. Efficient use of resources by using residues and recycled materials extend total available biomass.

Finland wants to be at the forefront of developing sustainable bioeconomy together with our global partners. This year, the conference takes place in the United States. Finland and the United States have both recently strengthened their strategic planning of the bioeconomy's future direction. It is an excellent time to gather in Washington D.C. to discuss the identified opportunities related to the production and smart use of renewable materials, biotechnology and expertise. Cooperation is one of the drivers of success, and we have valuable partnerships in issues related to the bioeconomy.



The Ministry of Agriculture and Forestry of Finland is pleased to support the World BioEconomy Forum 2023

I wish you a thought-provoking event!

Jaana Husu-Kallio
Permanent Secretary,
Ministry of Agriculture and
Forestry of Finland

Welcome remarks from Business Finland

I'm thrilled to welcome you to the World Circular BioEconomy Forum 2023 in Washington DC! Business Finland is the government organization for innovation funding and trade, travel and investment promotion. Our mission is to accelerate sustainable growth, generate prosperity and well-being for the society and enforce circular bioeconomy.

Business Finland is proud to have launched a new mission on Circular economy to accelerate systemic change and help solve major global challenges. Bioeconomy is a natural part of this mission. The mission strives towards new development and innovations to solve future challenges. With the mission, we want to accelerate international collaboration and connect Finland to new opportunities opening around the world.

Finland is committed to sustainable use of bioresources and among the first movers in taking biotechnology into use. Every individual plays an important role in circular economy, making it possible by everyday choices as consumers, by choosing recyclable, renewable materials and with environmentally sound decisions.



I'm glad you're participating this forum, and I can't wait to see what we accomplish together in the global Bio and Circular economy.

Warm regards,

Nina Kopola
Director General,
Business Finland



Introduction to the World BioEconomy Forum 2023

IN RESPONSE TO THE GROWING SIGNIFICANCE of the bioeconomy, the 6th World BioEconomy Forum is set to convene in Washington D.C., showcasing the latest global trends in the bioeconomy and highlighting the dynamic initiatives of both the USA and Finland. Notably, both countries recently renewed their bioeconomy strategies, demonstrating their commitment to this vital field.

AFTER A REMARKABLE YEAR, including participation in COP27 in Sharm el-Sheik, Egypt, and the development of groundbreaking global bioeconomy strategies, we are eager to continue this journey with you. The 2023 annual conference, a hybrid event in collaboration with the Finnish Embassy in the USA, aligns with our commitment to reduce carbon emissions and support climate change mitigation.

Bioeconomy, a crucial component of the global economy, is catalysing the onset of the bio revolution leading us to the 2023 theme, "Creating a Global Hub for the Bioeconomy," focuses on discussions and a global survey, with results announced on December 12 in Washington.

WITH NEARLY 60 NATIONAL BIOSTRATEGIES and various regional counterparts, the importance of the bioeconomy sector is underscored. The annual Forum's pillars cover 'The BioEconomy: People, Planet, Policies,' 'Corporate Leaders and the Financial World,' 'Bioproducts Around Us,' and 'Looking to the Future.'

THE FORUM RECOGNIZES REGIONAL VARIATIONS in bioeconomy visions. The biotechnology vision emphasizes research and application, while the bioresource vision focuses on RD&D for biological raw materials. The bioecology vision highlights ecological processes, optimizing energy use, promoting biodiversity, and avoiding monocultures and soil degradation. The 2023 season will culminate in the annual Declaration, encapsulating the essence of Bioeconomy Year 2023.

THE FORUM STRICTLY OPERATES UNDER THE FOUR-PILLAR STRUCTURE:

- I The Bioeconomy: People, Planet, Policies
- II Corporate Leaders, and the Financial World
- III Bioproducts Around us and
- IV Looking to the Future.

THIS STRUCTURED FRAMEWORK ALLOWS for a comprehensive evaluation of the circular bioeconomy's status, facilitating developments across the entire sector. The power and effectiveness of the Forum lie in its ability to holistically address the bioeconomy, fostering significant, concerted efforts in climate change mitigation.

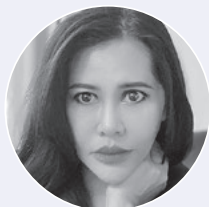
ALL FORUM PROGRAMS AND ACTIVITIES, including Roundtables and the annual Declaration, align seamlessly with the Four-Pillar Structure. This intentional design ensures that all stakeholders in the circular bioeconomy have a voice and a platform, contributing to a more inclusive and impactful dialogue and action.



The Four Pillars structure explains and promotes the circular bioeconomy..

Advisory board 2023

The World BioEconomy Forum Advisory Board is chaired by **Jukka Kantola**, and includes several accomplished bioeconomy experts.



Aida Greenbury
Global Sustainability
Advisor, Co-Founder, World
BioEconomy Forum



Jukka Kantola
Founder and CEO, World
BioEconomy Forum



Mark Rushton
Co-Founder,
World BioEconomy Forum



Dr Christian Patermann
"Father" of the European
Bioeconomy, Co-founder,
Honorary Chair of
the Advisory Board



Mark Rudnicki, Ph.D.
Professor of Practice
Forest Biomaterials,
Michigan Technological
University



Ludo Diels
Senior Advisor, VITO,
Professor Emeritus at Antwerp
University, Chair of the
Advisory and Programming
Group of Processes4PlanetT



Marcello Brito
Secretary General, Brazilian
Amazonian States Consortium



Jim Philp
Policy Analyst, OECD



Pramod Chaudhari
Executive Chairman,
Praj Industries Limited



Flora Ismail Tibazarwa
Board member, National
Environment Council, Vice
Chairperson, Biotechnology
Society of Tanzania,



David Brand
Chair and CEO
of New Forests



Rafael Cayuela Valencia
Author & Corporate Chief
Economist
EMEA Strategy Development
Senior Director EMEA
Sustainability Chair, Dow



Dr Rocio A Diaz-Chavez
Senior Research Fellow,
Imperial College London



Merja Penttilä
Research professor,
VTT Industrial Biotechnology



Ulla Lainio
Commercial Counsellor,
Embassy of Finland
in Washington DC

Information for online participants

THE 6th WORLD BIOECONOMY FORUM will be hosted in the **ProspectumLIVE Virtual Event** platform. All attendees will receive a link to the platform 7 days before the event starts, where you will be immediately directed to the Prospectum platform.

THE PLATFORM WORKS best with the latest browsers and devices. Functionality cannot be guaranteed with older mobile/tablet devices and browsers.

RECOMMENDED BROWSERS are Chrome, Safari, Firefox, Edge.

PLATFORM CONTAINS:

- Rooms for the live programme including interaction tool (chat & polls)
- Agenda, Materials, and other relevant information
- Virtual Showrooms
- Recordings of the live sessions (published after the Event)

THE PLATFORM STAYS ONLINE 14 DAYS after the event, and you will find all the live session recordings on the platform. This extended access affords you the opportunity to revisit live sessions and explore supplementary content at your convenience.

Information for in-person participants

WE ARE PLEASED to extend a warm welcome to you for your in-person attendance at the World BioEconomy Forum on 12 December, 2023, hosted at the Embassy of Finland in Washington, D.C.

Location: Embassy of Finland 3301 Massachusetts Avenue NW
Washington, D.C., 20008 USA

Date: 12 December 2023

Programme: The Forum's comprehensive program, structured around the Four-Pillar framework

Transportation: The Embassy does not provide visitor parking, and parking in the local area is limited. We recommend utilizing ride-sharing services or public transportation to reach the event. The closest metro stop is Woodley Park (red line), approximately a 20-minute walk away. Bus lines N2 and N4 conveniently stop right outside the Embassy.

Accessibility: The Embassy of Finland is wheelchair accessible. Should you require assistance with accessibility, please notify the Embassy at Eveliina.sterling@gov.fi.

Entry Requirements: Please bring a government ID for verification. Only registered participants will be granted entrance. Large bags, suitcases, or luggage are not permitted inside the Embassy building. A self-service coat check will be available, but the Embassy is not responsible for any items left unattended.



Programme

12 December 2023 – live from Washington D.C.!

8:30
EST

Studio open – live from Washington D.C.!

9:00
EST

Opening ceremony

9:30
EST



The Bioeconomy:
People, Planet, Policies

11:00
EST

Coffee break – Back to the studio

11:25
EST



Corporate Leaders and
the Financial World

12:25
EST

Lunch break – Back to the studio

13:20
EST



Bioproducts around us

14:50
EST

Coffee break – Back to the studio

15:15
EST

Bioproducts around us

16:30
EST

Coffee break – Back to the studio

16:50
EST



Looking to the Future

18:00
EST

Closing of the Forum 2023
Conclusion, Annual awards, Declaration

Times expressed in EST – Local time in Washington D.C.

Studio – live from Washington D.C.!

DURING THE BREAKS the online audience will be hosted by the studio team.

Your online hosts are **Flora Ismail Tibazarva** and **Matthias Zscheile**. They will bring you insights behind the scenes and provide commentary during the Forum:

**Hard Talk – Relaxed Environment
– Easy Access.**



Flora Ismail
Tibazarva



Matthias Zscheile

Programme

12 December 2023 – live from Washington D.C.!

08:30 OPEN DOORS AND REGISTRATION – MORNING COFFEE

Studio open – live from Washington D.C.!

Studio team opening for online audience

Hosted by World BioEconomy Forum team

Flora Ismail Tibazarva

Advisory Board, World BioEconomy Forum

Matthias Zscheile

Membership Director – World BioEconomy Association

09:00 OPENING – WELCOMING WORDS

Welcoming words

H.E. Mikko Hautala

Ambassador of Finland to the United States

Gregory Jaffe

Senior Advisor for Regulatory Affairs,

Office of the Secretary, U.S. Department of Agriculture

Amanda Beal

Commissioner, State of Maine Department of Agriculture,

Conservation & Forestry

Timo Jaatinen

Permanent Secretary,

Ministry of Economic Affairs and Employment of Finland

Jukka Kantola

Founder of the World BioEconomy Forum



Mikko Hautala



Gregory Jaffe



Amanda Beal



Timo Jaatinen



Jukka Kantola



The Bioeconomy: People, Planet, Policies

09:30 THE BIOECONOMY: PEOPLE, PLANET, POLICIES

Introduction of the theme by the session head

Dr Rocio A Diaz-Chavez Senior Research Fellow, Imperial College London
Advisory Board, World BioEconomy Forum

Opening remarks: A status of the Global Bioeconomy

Dr Jim Philp Policy analyst, OECD

Keynote: A status of Finland–USA collaboration

Ulla Lainio Commercial Counsellor, Embassy of Finland in Washington DC

Claire Hawkins Director, Natural Resource Markets & Economic Development
Department of Agriculture, Conservation & Forestry, State of Maine

Shannon Lott Natural Resources Deputy, Michigan Department of Natural Resources

09:50 Panel 1 – Latest development of national and regional biostrategies

Moderated by Dr Rocio A Diaz-Chavez

Panelists

Dr Kelly Seagraves Senior Advisor in the U.S. Department of State's Office
of the Special Envoy for Critical and Emerging Technology

Dr Alka Sharma Senior Adviser, Department of Biotechnology
Ministry of Science & Technology, Govt of India

Dr Silke Boger Agricultural Counsellor at the Delegation of the European Union
to the United States of America

Patrick Barret Agricultural Inspector, Research Division
Bioeconomy, Agriculture Knowledge & Innovation Systems

11:00 Coffee break – Back to the studio



Rocio A Diaz-Chavez



Jim Philp



Ulla Lainio



Claire Hawkins



Shannon Lott



Kelly Seagraves



Alka Sharma



Silke Boger



Patrick Barret



Corporate Leaders and the Financial World

11:25 CORPORATE LEADERS AND THE FINANCIAL WORLD

Introduction of the theme by the session head

Asko Hyttinen

Board member, World BioEconomy Forum

Keynote: Global economy review and role of the bioeconomy in it

Rafael Cayuela

Author & Corporate Chief Economist
EMEAI Strategy Development Senior Director EMEAI
Sustainability Chair, Dow

Panel 2 – Financing the Bioeconomy

Moderated by

Asko Hyttinen

Board member, World BioEconomy Forum

Panelists

Mary Lystad

Global Sector Lead
Forest and Wood Products
Manufacturing Agribusiness & Services Department
International Finance Corporation

Ellison M. Wright

Senior Environmental Finance Specialist at World Bank Group

Camillo Santa

Biodiversity & Natural Capital Specialist
Inter America Development Bank (IADB)

Paula Caballero

Regional Managing Director for Latin America
The Nature Conservancy

12:25 Lunch break – Back to the studio



Asko Hyttinen



Rafael Cayuela



Mary Lystad



Ellison M. Wright



Camillo Santa



Paula Caballero

14.2.24



14 FEB 2024 | OULU, FINLAND

HYDROGEN-THEMED BUSINESS FORUM

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Innovative technology is the key to shifting from a fossil-based to a bio-based circular economy, crucial for achieving the European climate targets.

As a venture capital fund, our primary goal is to invest in scale-up companies with high potential for excellence on a pan-European or global scale - **delivering both impact and financial returns at the highest level.**

Our entire experience in venture capital and our investment scope spanning the circular economy and bioeconomy is focused on this purpose.

SUPPORTED BY:



INVESTORS:



www.ecbf.vc

Innovative bioeconomy originates from forests.



www.forestindustries.fi



Finnish Forest Industries



Bioproducts around us

13:20 BIOPRODUCTS AROUND US

Introduction of the theme by the session head

Dr Ludo Diels Prof. Emeritus at Antwerp University,
senior advisor at VITO and portfolio manager of Processes4Planet

Keynote: Biorevolution under way?

Dr Andrea Hodgson Program Scientist on the BioFutures Program, Schmidt Futures

13:40 Panel 3 – Biotechnology – a game changer?

Moderated by

Dr Merja Penttilä Research professor, VTT Industrial Biotechnology

Panelists

Dr India Hook-Barnard Executive Director, Engineering Biology Research Consortium, EBRC

Dr Megan J. Palmer Senior Director, Public Impact, Ginkgo Bioworks

M. Abdul Ali Corporate Strategy & Business Development, DMC Biotechnologies

Dr Chris Stowers Senior Director, Biotechnology & Analysis, dsm-firmenich

14:50 Coffee break – Back to the studio

15:15 Keynote: Sustainable use of bioresources

Mark Pitts Executive Director, Government & Industry Affairs
at American Forest & Paper Association

Keynote: Forest health is challenged by changing climate – implications for bioeconomy?

Dr Markus Melin Research Manager at Natural Resources Institute Finland (Luke)

15:35 Panel 4 – Forest-based value chains – “evolving lignin”

Moderated by

Dr Ludo Diels Prof. Emeritus at Antwerp University,
senior advisor at VITO and portfolio manager of Processes4Planet

Panelists

Stefan Sundman VP, Public Affairs at UPM

Dr Mojgan Nejad Associate Professor at Michigan State University

Lauri Lehtonen SVP, Head of Innovation Biomaterials, Stora Enso

Jack Miller Principal Consultant, Biobased Market

Dr Kelly Tiller Founder & Chief Strategy Officer at Genera Energy Inc.

16:30 Coffee break



Ludo Diels



Andrea Hodgson



Merja Penttilä



India Hook-Barnard



Megan J. Palmer



M. Abdul Ali



Chris Stowers



Mark Pitts



Markus Melin



Stefan Sundman



Mojgan Nejad



Lauri Lehtonen



Jack Miller



Kelly Tiller





Looking to the Future

16:50 LOOKING TO THE FUTURE

Introduction of the theme by the session head

Dr Mark Rudnicki Professor of Practice
Forest Biomaterials, Michigan Technological University

Keynote: Results of the global hub for the bioeconomy Survey

Flora Ismail Tibazarva Board member, National Environment Council
Vice Chairperson, Biotechnology Society of Tanzania
Advisory Board, World BioEconomy Forum

17:00 Panel 5 – A global hub for the bioeconomy theme

Moderated by

Dr Mark Rudnicki Professor of Practice
Forest Biomaterials, Michigan Technological University

Panelists

Dr Lev Neretin Environment Team Lead
Head of Environment and Social Management Unit
Office of Climate Change, Biodiversity and Environment (OCB) at FAO

Dr Christine Lang Co-Chair of the International Advisory Council
on Global Bioeconomy (IACGB)

Gerard Ostheimer Manager of the Clean Energy Ministerial Biofuture Campaign

Jukka Kantola Founder and CEO at the World BioEconomy Forum

Sarah R Carter Senior Fellow
Federation of American Scientists

18:00 CLOSING OF THE FORUM 2023

Annual awards 2023

Start-up of the year

Bio Act of the year

Bioproduct of the year

Bio Person of the year

Releasing the Declaration 2023

kuubiO

**Actualizing bio and circular
economy visions *together***

Finland
EU Ita
2014-2020



KUUSIMO

POHJOIS-
POHJANMAA
REGION OF FINLAND



Mark Rudnicki



*Flora Ismail
Tibazarva*



Lev Neretin



Christine Lang



Gerard Ostheimer



Jukka Kantola



Sarah R Carter



SUSTAINABLE SOLUTIONS FOR THE BENEFIT OF OUR CUSTOMERS AND ENVIRONMENT

PONSSE'S ROOTS ARE DEEP IN THE FOREST. Forest connects us with our customers and partners globally. Being close to our customers is how we continuously develop and innovate forestry solutions that make a difference.

We are continuously developing our solution offerings as well as our operations globally. To innovate, we experiment and develop our ecosystems to support fast introduction of new technologies to add value to our customers. Being able to provide the best available solutions for forestry customers is a matter of honor to us.



A logger's best friend
www.ponsse.com

Awards session

WHAT ARE THE WORLD BIOECONOMY FORUM AWARDS?

The World BioEconomy Forum aims to promote the incredible work ongoing in the circular bioeconomy to fight climate change and create a carbon neutral world. The awards recognise companies, products and people whose contribution created a remarkable impact on the global circular bioeconomy and climate change mitigation.

Categories



Bio Act of the year

The most remarkable contribution during 2023 related to the circular bio-economy and climate change mitigation. The Advisory Board will consider contributions made by organisations, groups or other entities which facilitate the circular bioeconomy, or mitigate climate change



Bioproduct of the year

The most remarkable bio-product during 2023 related to the circular bio-economy and climate change mitigation. The Advisory Board will consider the novelty and innovativeness of the bioproduct, which can be in commercial use or have a clear path to commercialisation.



Bio Person of the year

The most remarkable person during 2023 within the circular bioeconomy and climate change mitigation. The Advisory Board will consider recognised impact of this individual for the circular bioeconomy and mitigating climate change.



Start-up of the year

The most remarkable startup during 2023 related to the circular bioeconomy and climate change mitigation. The Advisory Board will consider recognised impact of the start-up for the circular bio-economy and climate change.

VTT stands at the forefront of biotechnology – developing processes, technologies and materials from lab-to-pilot scale

- Novel bio-based materials and structures from biomaterial feeds e.g. biocomposites, biomass, fibre and cellulose
- Biotechnical production of high value chemicals and proteins, biosynthetic materials and material components
- VTT CellularFood to establish cellular agriculture based novel food solutions

Read more:

vttresearch.com/ourservices/plant-biotechnology

vttresearch.com/ourservices/vtt-cellularfood-creating-and-piloting-sustainable-novel-food-solutions

World BioEconomy Association



WORLD BIOECONOMY ASSOCIATION is established as an association at the end of 2023 to respond to the need for a global hub for strengthening and promoting the circular bioeconomy.

World Bioeconomy Association unites the global bioeconomy community to foster sustainable economic growth and advance the transition to a circular bioeconomy. Our partners and members include a diverse range of stakeholders, public organisations, business leaders, academics, government officials, NGOs, or other civil society representatives, all committed to pursuing progress in the bioeconomy.

The bioeconomy is a multisectoral concept, embraced by three visions of the bioeconomy in WBA strategy and communication.

- A bioresource vision, focusing on the role of research, technology development and upscaling, needed for conversion and value-chain-valorisation of biomass feed stocks, from agriculture, marine, and forestry sectors
- A biotechnology vision, emphasizing the importance of biotechnology- and biomanufacturing research, for application and commercialisation in different sectors.
- A bioecology vision, highlighting the importance of ecological processes that optimise the use of land, energy and nutrients, giving space for promoting biodiversity, strengthen crop plants by out-phasing pesticides and protect soil quality against degradation. While the previous two visions are technology-focused and give a central role to RD & D in globalised systems, this vision emphasises the potential for regionally concentrated circular and integrated processes and systems.

The Association encompasses a comprehensive range of perspectives, fostering knowledge building and business opportunities that align with the principles of a sustainable circular bioeconomy.

The association is dedicated to championing the cause of the global circular bioeconomy for improved use of the global biological resources. Its objectives and activities are centred around the following key elements:

Knowledge and Information Sharing:

- Facilitating the exchange of data and information among its members.
- Promoting the adoption of best practices, innovative strategies and advanced technologies is essential for fostering the expansion of the global circular bioeconomy. This growth holds the potential to significantly contribute to positive outcomes in critical areas such as climate resilience, biodiversity conservation, food security, public health, and other relevant sectors.
- Encouraging the creation of new cooperation and alliances across national borders and continents
- Empowering the members to network globally and creating free discussions based on the Chatham House Rules

Public Outreach:

- Disseminating general information about the circular bioeconomy for improved use of the bioresources to a broader audience

Advocacy:

- Actively advocating for the circular bioeconomy, achieved by unlocking the full value of the biomass, hereby also representing the interests of its members

Collaborative Research:

- Engaging in research, collaboratively among its members, academic institutes, private industries, and public authorities to develop innovative systems and products that contribute to the advancement of the circular bioeconomy.



INTERESTED IN THE MEMBERSHIP? Please send your application to info@wcbef.com or contact us discuss further.

Global hub survey

THE WORLD BIOECONOMY FORUM (WCBEF) has held an annual event and quarterly round tables since 2018 and has observed traction in the bioeconomy landscape, including:

- An increased number of bioeconomy strategies. There are already close to 60 national bio strategies and several regional bio strategies.
- The value of the bioeconomy is increasing. Schmidt Futures reports it may be even 30 trillion USD by 2030. Countries like the USA have projected values for the bioeconomy; in some countries, the granularity is at the state level. The state of Para in Brazil estimates their bioeconomy value at 120 billion USD.
- There is also increasing discussion on product safety and acceptance, supply chains, traceability, feedstock availability, etc that would benefit discussion at the global level.
- WCBEF surveyed the landscape from the 15th of February to the 31st of October 2023 to assess the significance of these ideas by deep-diving into three main areas:
- What aspects of the bioeconomy should be discussed at the global level?
- What structure should a global platform take?
- How should this global platform be resourced?

THE SURVEY ENGAGED with individuals and entities from across the spectrum: public, private, research and development, non-governmental organisations, and governmental agencies. WBF presented updates from the survey in the quarterly roundtables all through 2023. By the 31st of October, the results indicated an overwhelming preference for a global mechanism.

A WIDE VARIETY OF TOPICS for discussion at the global level were put forward by the survey respondents, key ones include:

- Sustainability in particular the movement of food as the impacts and benefits go beyond national borders.
- Biomaterials are important as these could disrupt traditional materials and grow new industries.
- Energy and biotechnology are also featured despite having international platforms and it speaks to the interplay of the bioeconomy and other biobased initiatives.
- The lack of blue bioeconomy in several of the current bioeconomy strategies
- Access to and exchange of data and information for advancing and supporting bioeconomy strategies. Whilst other global initiatives such as biotechnology have global databases there is none in the bioeconomy space.
- Knowledge sharing in the bioeconomy is limited in the absence of functional mechanisms to facilitate learning.

WE AIM TO CONTINUE this dynamic survey annually as a crowding mechanism to collect strategic direction to further sustainable circular bioeconomy initiatives.

World Bioproduct Day: Celebrating Sustainability and Environmental Advocacy

IN CONTEMPLATING THE FUTURE OF OUR PLANET, the World BioEconomy Forum recognises the pivotal role of bio-based products in surpassing non-renewable alternatives. Shifting towards sustainable solutions, away from fossil fuel feedstocks, is essential for a healthier planet. We are dedicated to elevating awareness about the importance of bioproducts and their contribution to broader goals of environmental sustainability and climate action.

EARLIER IN 2021, THE WORLD BIOECONOMY FORUM unveiled a groundbreaking initiative - "World Bioproduct Day," reserved for the 7th of July and has now become an annual event. This occasion invites individuals to share their experiences and stories related to bioproducts. We encourage you to participate by posting a photo or video showcasing a bioproduct significant to you, amplifying the impact of bio-based materials.



WE INVITE YOU TO SHARE your unique bioproduct story using the hashtag #bioproductday across various social media platforms, including Twitter, LinkedIn, and YouTube. This is an opportunity to showcase a bioproduct that has left a significant impact, whether from personal experience or on behalf of your organisation.

LET US UNITE to inspire others with our meaningful bioproduct narratives, contributing to a sustainable and resilient future!



World BioEconomy Shop

THE WORLD BIOECONOMY SHOP IS AN ONLINE shop for products, services, reports related to circular bioeconomy. We also think it is important to have an online store to help the circular bioeconomy community find sector related products on one site. The World BioEconomy Shop offers the Forum's own products as well as those from other stakeholders in the sector.

VISIT THE SHOP HERE:
wcbeef.com/online-store

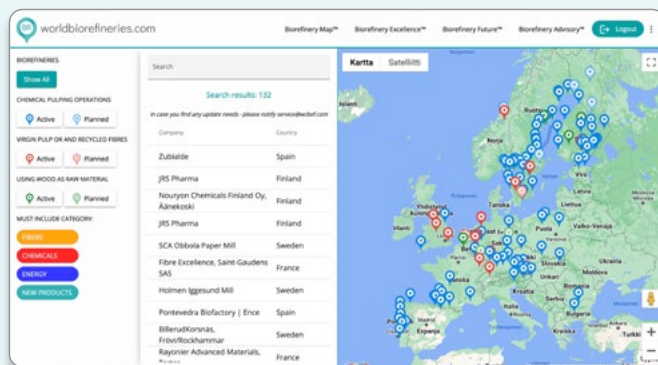


Biorefinery Map™



BIOECONOMY IS GROWING worldwide and benefits nearly every sector of the economy. Its continued growth is critical for sustainable development in all nations of the world. The forest sector is currently a major contributor to the bioeconomy through traditional products such as wood products, paper and a large array of emerging products associated with the biorefinery concept. While forest-based biorefineries are increasingly producing advanced biofuels, a wide variety of biochemicals and biomaterials around the world, there has never been a well-structured database of the current facilities and production details.

THIS YEAR, THE WORLD BIOECONOMY FORUM LAUNCHED its Biorefinery Map™. This is a detailed database and map showing biorefineries in Europe (EU27 + Switzerland, Norway, UK), who are they operated by and where are they located? Utilising the Biorefinery Map™ will help users gain a comprehensive idea of operators in this field in Europe. On the map, biorefineries are defined, identified, and put into three major categories and users can navigate around them using our browsing tool.



CURRENTLY WE ARE OFFERING FREE DEMOS to any interested parties.

BOOK A DEMO:

wcbeef.com/online-store/biorefinery-map-service



Bioeconomy News App

THE WORLD BIOECONOMY FORUM LAUNCHED the world's first breaking news app for global stakeholders operating in the circular bioeconomy. The app, which is available for both Android and IOS devices, alerts users to the very latest breaking news and developments taking place in the rapidly growing sector.

THE APP COVERS all the latest news emerging from the global circular bioeconomy, and importantly will fit into the World BioEconomy Forum's four thematic pillars of; **People, Planet, Policies; Corporate Leaders and the Financial World; Bioproducts Around Us and Looking to the Future.**



World BioEconomy News™

WORLD BIOECONOMY NEWS FOCUSES ON THE LATEST NEWS and developments surrounding bioeconomy respective to The World BioEconomy Forum's thematic sessions: The Bioeconomy: People, Planet, Policies; Corporate Leaders and the Financial World; Bioproducts around us and Looking to the Future. Our World BioEconomy News service is available on our website, as an email subscription, and mobile application directly to your smartphone.

Circular bioeconomy breaking news and developments on the go.

VISIT THE NEWS:

wcbef.com/news-bulletin



Beyond sustainability Towards innovative bioeconomy

Regenerative forestry will help us boost economic growth and natural assets side by side. With our new Kemi bioproduct mill, we are pushing for innovative bioeconomy. The entire forest industry can become a frontrunner and a role model in responsibility and sustainable production.

Together, we can embark on a regenerative journey, starting from sustainable forestry, leading to the future of regenerative pulp and paper industry.



Media partners



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The World BioEconomy Forum is a global platform for circular bioeconomy stakeholders to share ideas and promote bio-based solutions covering bioresource, biotechnology and bioecology visions. We are fully committed to sustainability across the board and believe that climate change is real. As there is no one-size-fits-all bioeconomy, we evaluate the status of the circular bioeconomy with the Four-Pillar Structure. All our programmes and other activities are based on the Four-Pillar Structure.

www.wcbef.com



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