



2nd INTERNATIONAL SCIENTIFIC CONFERENCE

**SUSTAINABLE BIOECONOMY  
DEVELOPMENT 2021:  
Adaptation to Climate Change**

**PROGRAMME  
20–21 May 2021**

Vytautas Magnus University Agriculture Academy  
Faculty of Bioeconomy Development  
Universiteto Str. 10, Akademija, Kaunas District, Lithuania

## **Dear scientists and experts, bioeconomy development policy makers and colleagues,**

We are pleased to invite you to participate in the 2<sup>nd</sup> International Scientific Conference “Sustainable Bioeconomy Development 2021: Adaptation to Climate Change” which is organized in collaboration with scientists from Latvia and other countries.

It is a pleasure for us to welcome you at Vytautas Magnus University Agriculture Academy Faculty of Bioeconomy Development, which opens to challenges and changes, applying the best practice of universities from all over the world, developing the international character, serving its country, seeking continuous improvement and leadership in the research and studies on sustainable development of bioeconomy and rural areas.

Today, we open new doors to the future together fighting with the crisis of a pandemic and seeking to implement the European Green Deal. The new initiative “Next Generation EU” is designed to support science and innovation, support climate policy reform, protect biodiversity and fight with climate change. The fight against climate change accounts for 30% of EU funding. It is the highest share ever of the European budget and it must be used for the right solutions and tools for climate change.

This year, our conference is dedicated to these challenges. We believe that together we will make the right decisions on climate change issues through policy and public investment in bioeconomy research; consumer and producer behaviour in the context of climate change; business and place models for circular bioeconomy; accelerating bioeconomy through investment and financing decisions.

We wish you the productive work and discussion during conference events. We wish you to find ideas on making decisions for measures that will contribute to climate change. We invite you to enjoy the event and co-operation of scientists, policy makers and practitioners.

Yours sincerely,

Chair of the Scientific Committee Dr. Erika Besusparienė

## Scientific Committee

Chairperson:

Lect. Dr. Erika Besusparienė, VMU

Members:

Prof. Dr. Vilija Aleknevičienė, VMU

Prof. Dr. Vilma Atkočiūnienė, VMU

Prof. Dr. Astrida Miceikienė, VMU

Prof. Dr. Andra Zvirbule, LLU

Assoc. Prof. Dr. Anastasija Novikova, VMU

Assoc. Prof. Dr. Dina Popluga, LLU

Assoc. Prof. Dr. Gintarė Vazonienė, VMU

Dr. Anne Pöder, EMU

## Organising Committee

Chairperson:

Lect. PhD candidate Aušra Nausėdienė

Members:

Dr. Aistė Ragauskaitė

Lect. PhD student Asta Bendoraitytė

PhD student Jevgenija Česnauskė

PhD student Virginija Kargytė

Aurelija Markelytė

**Email:** [SBDconference@vdu.lt](mailto:SBDconference@vdu.lt)

**Conference website:** <https://sbd.vdu.lt/>

## Conference Programme

### Thursday, 20 May 2021

9:00–9:40	Registration of Participants
9:40–11:30	Plenary Session
11:30–12:00	Break
12:00–14:00	Parallel Sessions <i>Policy and Public Investment in Bioeconomy Research Accelerating Bioeconomy through Investment and Financing Decisions</i>
14:00–15:00	Break
15:00–17:00	Parallel Sessions <i>Policy and Public Investment in Bioeconomy Research Accelerating Bioeconomy through Investment and Financing Decisions</i>

### Friday, 21 May 2021

9:00–10:00	Registration of Participants
10:00–11:30	Panel Discussion <i>The European Green Deal Policy Initiatives: (R)Evolution of Fuels, Fertilizers, and Plastics Good Practice Business Models for Sustainable Bioeconomy Development in the Baltic Sea Region</i>
11:30–12:00	Break
12:00–14:00	Parallel Sessions <i>Consumer and Producer Behaviour in the Context of Climate Change Business and Place Models for Circular Bioeconomy</i>
14:00–15:00	Break
15:00–17:00	Workshop <i>Food Systems: My Power in Enhancing Sustainable Consumption</i>

## Plenary Session

**Thursday, 20 May 2021**

**9:40–11:30 (EEST)**

### **Moderators:**

Prof. Dr. Vilma Atkočiūnienė, VMU

Lect. Aušra Nausėdienė, VMU

### **Official Opening of the Conference**

9:40–10:00 **Opening Remarks:**

**Prof. Dr. Juozas Augutis**, Rector of Vytautas Magnus University

**Prof. Dr. Irina Pilvere**, Rector of the Latvia University of Life Sciences and Technologies

**Prof. Dr. Astrida Miceikienė**, Chancellor of Vytautas Magnus University Agriculture Academy

### **Plenary Presentations**

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10:00–10:30 Climate Resilient Food Production in a Sustainable Bioeconomy, by Adaptive Agricultural Practices Based on Circular Resource Management

**Dr. Martin C. Th. Scholten**

*Wageningen University & Research (The Netherlands)*

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10:30–11:00 Governance and Sustainability Implications of Agroecological Transitions

**Dr. Gerald Schwarz**

*Thünen Institute (Germany)*

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11:00–11:30 Circular Economy and SDGs: Connections for a More Sustainable Development Model

**Dr. Lucia Rocchi**

*University of Perugia (Italy)*

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Lucia Rocchi



Martin C. Th. Scholten



Gerald Schwarz

## Section I

### ***Policy and Public Investment in Bioeconomy Research Accelerating Bioeconomy through Investment and Financing Decisions***

**Thursday, 20 May 2021 Moderators:**

**12:00–17:00 (EEST)**

Assoc. Prof. Dr. Jurgita Baranauskienė, VMU

Lect. Dr. Erika Besusparienė, VMU

PhD student Kristina Gesevičienė, VMU

#### **The Role of Green Taxes in the Development of Bioeconomy: The Cases of Lithuania and Georgia**

*Astrida Miceikienė, Vytautas Magnus University (Lithuania);*

*Vazha Verulidze, Batumi Shota Rustaveli State University (Georgia)*

#### **Trends in Renewable Energy Support and Production in Selected European Countries**

*Maciej Stawicki, Agnieszka Wojewódzka-Wiewiórska, Warsaw University  
of Life Sciences (Poland)*

#### **Reducing GHG Emissions in the EU Member States: Analysis of Environmental Taxes and Support Measures**

*Kristina Gesevičienė, Daiva Rimkuvienė, Vytautas Magnus University  
(Lithuania)*

#### **Challenges of the Tax System Regarding the Impact of Technological Progress on Employment in Agriculture Sector**

*Jevgenija Česnauskė, Vytautas Magnus University (Lithuania)*

#### **Forest Bathing and Therapy: New Approach to the Forest(ry)**

*Agnė Abramovičienė, Klaipeda State University of Applied Science  
(Lithuania)*

#### **Mapping Activities in the Field of Bioeconomics in the Czech Republic**

*Jitka Menhazova, Mendel University (Czech Republic)*

#### **The Role of Landscape Design and Planning in Providing Blue and Green Infrastructure for the Bioeconomy; Contributing to Healthy Landscapes and Healthy People**

*Joanna Storie, Simon Bell, Estonian University of Life Sciences (Estonia)*

**14:00–15:00 Break**

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## **Implementation of Bioeconomy in Selected Food Processing Enterprises in Poland**

*Anna Zielińska-Chmielewska, Poznań University of Economics and Business (Poland); Stanisław Bielski, Renata Marks-Bielska, University of Warmia and Mazury in Olsztyn (Poland)*

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## **Sustainable Land Use and Food Security in the Context of Climate Change**

*Vasily Nilipovskiy, State University of Land Use Planning (Russia)*

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## **Diagnosis of Financial Distress in Family Farms**

*Jūratė Savickienė, Kaunas University of Applied Sciences (Lithuania); Emilija Savickaitė, Vytautas Magnus University (Lithuania)*

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## **Relationship between Green Finance and Bioeconomy: Conceptual Framework**

*Asta Bendoraitytė, Vilija Aleknevičienė, Vytautas Magnus University (Lithuania)*

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## **Poster Presentations**

### **From Industrial Agriculture to the Sustainable Bioeconomy: Key Trends**

*Astrida Miceikienė, Vytautas Magnus University (Lithuania); Damian Walczak, Nicolaus Copernicus University (Poland)*

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### **Towards a Policy to Support the Local Food Systems: The Case of Latvia**

*Līga Paula, Kaspars Naglis-Liepa, Dace Kaufmane, Līga Proskina, Sintija Ozolniece, Latvia University of Life Sciences and Technologies (Latvia)*

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### **Digitization and the Bioeconomy in Lifelong Learning in the Context of the COVID Pandemic**

*Lilīta Abele, Liepāja University (Latvia)*

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### **Analysis of the Diversity European Union Countries in the Level of Bioeconomy**

*Larysa Marchanka, Viktorija Padhornaya, Francisk Skorina Gomel State University (Belarus)*

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### **Evaluation of Bio-Based Projects According to the SDGs**

*Jurgita Baranauskienė, Vytautas Magnus University (Lithuania)*

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### **Pricing of Certification for Ecological Products' Processing for Sustainable Business Management**

*Dalia Juočiūnienė, Neringa Stončiuvienė, Vytautas Magnus University (Lithuania)*

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### **Environmental implications of agriculture in bio-economy context Peter**

*Peter Bulla, Natália Turčeková, Peter Bielik, Izabela Adamčíková, Dominika Čeryová, Alisher Kabylda, Slovak University of Agriculture in Nitra (Slovakia)*

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## Panel Discussion



**BalticBiomass4Value**

**Opening Remarks:** **Assoc. Prof. Dr. Bernardas Vazonis**,  
Dean of Faculty of Bioeconomy Development

**Friday, 21 May 2021**      **Moderator:**  
**10:00–11:30 (EEST)**



**Virginija Kargytė**  
*Coordinator of the  
Interreg Baltic Sea Region  
Project “Unlocking the  
Potential of Bio-Based  
Value Chains in the Baltic  
Sea Region”*

10:00–11:00      **Part I. The European Green Deal Policy Initiatives:  
(R)Evolution of Fuels, Fertilizers, and Plastics**

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### Key Speakers



**Dr. Vincent Eijsink**, *Professor of the  
Faculty of Chemistry, Biotechnology  
and Food Science at the Norwegian  
University of Life Sciences (Norway)*



**Ahto Oja**, *Member of the Board of  
“Balti Biometaan” that was founded  
with the aim to develop the production  
of biomethane as a motor fuel in  
Estonia and the Baltics (Estonia)*



**Dr. Audrius Gegeckas**, *Head of  
R&D Department at “Bioenergy LT”  
that provides innovative and  
sustainable high-biotech solutions  
improving crop productivity and  
maintaining soil biological activity  
(Lithuania)*

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**Dr. Gustaf Forsberg**, Senior Specialist of “ThermoSeed Global” that offers innovative, highly efficient, and environmentally friendly seed treatment technology (Sweden)



**Dr. Inga Matijošytė**, Senior Researcher and Head of Applied Biocatalysis Sector at the Institute of Biotechnology of Vilnius University Life Sciences Centre (Lithuania)



**Dr. Irena Vitkauskienė**, Business Development Consultant at “Plastiksė” that manufactures plastic packaging products for beverage, food, cosmetic, chemical, and medical industries (Lithuania)

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11:00–11:30

**Part II.** Good Practice Business Models for Sustainable Bioeconomy Development in the Baltic Sea Region

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**Key Speaker**



**Dr. Ants-Hannes Viira**, Senior Researcher and Director of the Institute of Economics and Social Sciences at the Estonian University of Life Sciences (Estonia)

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## Section II

### *Consumer and Producer Behaviour in the Context of Climate Change*

**Friday, 21 May 2021 Moderators:**

**12:00–14:00 (EEST)**

Prof. Dr. Andra Zvirbulė, LLU

Assoc. Prof. Dr. Anastasija Novikova, VMU

#### **Who Cares About Nature in Rural Areas in Poland? Analysis of Socio-Economic Characteristics of the Inhabitants**

*Agnieszka Wojewódzka-Wiewiórska, Maciej Stawicki, Warsaw University of Life Sciences (Poland)*

#### **How Corporate Social Responsibility Affects Employees Behavior?**

*Dovilė Valytė-Žeimienė, Loreta Bukšnytė-Marmienė, Vytautas Magnus University (Lithuania)*

#### **Attitudes and Intention to Use Renewable Energy in Lithuania: Focus on Bioenergy**

*Renata Dagiliūtė, Vytautas Magnus University (Lithuania)*

#### **Environmental Protection in the Financial Decisions of Individuals**

*Dorota Krupa, Damian Walczak, Nicolaus Copernicus University in Toruń (Poland)*

#### **Interim Evaluation of the Implementation of the EU and Lithuanian Strategic Climate Change Mitigation and Environmental Protection Goals According to the Data of 2020**

*Sigitas Šamanskas, Kaunas University of Applied Sciences (Lithuania)*

#### **Assessing Youth Motivation for Working in the Agricultural Sector**

*Laura Girdžiūtė, Anastasija Novikova, Erika Besusparienė, Aušra Nausėdienė, Vytautas Magnus University (Lithuania)*

#### **Poster Presentations**

#### **Impacts of Urban Development on Climate Changes**

*Shahnaz Amanova, ANAS Institute of Geography (Azerbaijan)*

#### **Social Dimension of Short Food Supply Chains**

*Gintarė Vaznonienė, Vytautas Magnus University (Lithuania)*

#### **Cultural Ecosystem Services: The Case of Coastal-Rural Area (Nemunas Delta and Curonian Lagoon, Lithuania)**

*Rasa Pranskūnienė, Lina Marcinkevičiūtė, Vytautas Magnus University (Lithuania)*

#### **Lithuanian's Awareness About Climate Change and Changes in Climate-Friendly Behaviour in the Context of EU**

*Miglė Jakučionytė-Skodienė, Genovaitė Liobikienė, Vytautas Magnus University (Lithuania)*

#### **Cost-Benefit Analysis of Reduced Intensity Tillage Systems, Straw and Green Manure Combinations**

*Asta Bendoraitytė, Vaclovas Bogužas, Vaida Steponavičienė, Lina Skinulienė, Aušra Sinkevičienė, Vytautas Magnus University (Lithuania)*

## Section III

### **Business and Place Models for Circular Bioeconomy**

**Friday, 21 May 2021**

**12:00–14:00 (EEST)**

**Moderators:**

Dr. Anne Pöder, EMU

PhD student Jevgenija Česnauskė, VMU

#### **Role of Social Entrepreneurship in Dealing with Environmental Problems in Latvia**

*Linda Groma, Lāsma Līcīte-Ķurbe, Latvia University of Life Sciences and Technologies (Latvia)*

#### **Business and Science Model for Circular Bioeconomy**

*Stanisław Bielski, Renata Marks-Bielska, University of Warmia and Mazury in Olsztyn (Poland); Anna Zielińska-Chmielewska, Poznań University of Economics and Business (Poland)*

#### **Comparison of Farms Focusing on Dairy Production in the Production and Economic Conditions of the Slovak Republic and Lithuania**

*Patrik Rovny, Dušan Dobák, Slovak University of Agriculture in Nitra (Slovakia)*

#### **Co-Creation at the Crossroads of the Short Food Supply Chain and the Local Food System for the Sustainable Development of the Area**

*Vilma Atkočiūnienė, Vytautas Magnus University (Lithuania)*

#### **Perception and Advocacy of Climate Change Impact on Agro-Based Bioeconomy in Pakistan**

*Fahd Rasul, University of Agriculture Faisalabad Pakistan (Pakistan)*

#### **Vegetation Health Assessment in Kaunas: Implication for Climate Change**

*Okikiola M. Alegbeleye, Alfred O. Onefeli, Department of Social and Environmental Forestry (Nigeria)*

#### **How Advanced digital technologies bring value and enable the transformation of food supply chain?**

*Kristina Šermuksnytė-Alešiūnienė, Daiva Biškauskė, Lithuanian Centre for Social Sciences. Institute of Economics and Rural Development (Lithuania)*

#### **Poster Presentations**

##### **Rethinking Tourism to Mitigate the Effects of COVID-19. Transition to Sustainable Circular Economy**

*Daiva Labanauskaitė, Deimena Montvydaitė, Klaipėda University (Lithuania)*

##### **The Evidence of Agricultural Total Factor Productivity Convergence in the European Union Countries**

*Peter Bielik, Natália Turčeková, Izabela Adamičková, Stefaniia Belinska, Miriam Buliková, Slovak University of Agriculture in Nitra (Slovakia)*

##### **Limitations of Universal Management Models in the Development of High Value-Added (HVA) Biobusiness**

*Judita Astrovienė, Jolita Grėblikaitė, Vytautas Magnus University (Lithuania)*

##### **Future of Zero Waste Gardens**

*Audronė Ispiryan, Jurgita Kulaitienė, Lithuanian Research Centre for Agriculture and Forestry (Lithuania)*

## Workshop

### *Food Systems: My Power in Enhancing Sustainable Consumption*

**Friday, 21 May 2021 Moderators:**

**15:00–17:00 (EEST)**

Prof. Dr. Vilma Atkočiūnienė, VMU  
Assoc. Prof. Dr. Gintarė Vaznonienė, VMU  
Dr. Aistė Ragauskaitė, VMU  
Lect. PhD student Asta Bendoraitytė, VMU

15:00–15:15 **Participant's Main Stones**

15:15–15:30 **Local Food System and my Power for Sustainable Future**

*Vilma Atkočiūnienė, Vytautas Magnus University (Lithuania)*

15:30–16:45 **Practical – Co-Creation Session**

16:45–17:00 **My Power Button ON!**

#### #mainstone

- My power in food system
- Innovation of food system
- Future of food system

#### #themes

- Responsible consumption
- Biologically valuable food
- Local vs global food products
- Sustainability

#### #mypower

- Will
- Responsibility
- Respect
- Empathy
- Motivation

#### #methods

- Creative thinking
- Design thinking
- Summing thinking
- Challenging thinking

#### #attend

Everyone who is interested:

- Students
- Scientists
- Innovators

#### #myfuture

The 5's of sustainable development:

- People
- Planet (my land, water, air)
- Peace
- Partnership
- Prosperity



Vilma Atkočiūnienė Gintarė Vaznonienė Aistė Ragauskaitė Asta Bendoraitytė



VYTAUTAS MAGNUS  
UNIVERSITY  
AGRICULTURE  
ACADEMY



Latvia University  
of Life Sciences  
and Technologies

## About the Organisers

### Faculty of Bioeconomy Development (VMU, Lithuania)

Faculty of Bioeconomy Development situated in the environmentally friendly campus of the VMU Agriculture Academy. The Faculty of Bioeconomy Development formed on 1 January 2019 of the Faculty of Economics and Management. Faculty of Bioeconomy Development is the first in Lithuania



in development and research in the science of bioeconomy, which deliver unique study programmes centred on one of the key areas of bioeconomy – agriculture and regional development. Goals of faculty are to prepare highly qualified, professional experts in policy making for agriculture and regional development, holding sufficient competence to create own business and develop close relations with bioeconomy business leaders and authorities.

### Faculty of Economics and Social Development (LLU, Latvia)

The Faculty of Economics and Social Development was formed in 2013 uniting the pedagogical and scientific potential of two faculties – the Faculty of Economics with its 50 years long history and the Faculty of Social



Sciences with its 12 years long history, becoming currently the largest faculty of the university and providing studies at all levels – the undergraduate, master and doctoral level. The graduates are highly qualified specialists and managers in areas of economics, marketing, accounting, finances, entrepreneurship, regional development, law, sociological research and management science.

## The conference is supported by Lithuanian Rural Network:

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EUROPOS ŽEMĖS ŪKIO FONDAS KAIMO PLĖTRAI:  
EUROPA INVESTUOJA Į KAIMO VIETOVES  
PROJEKTĄ REMIA LIETUVOS RESPUBLIKA



LIETUVOS RESPUBLIKOS  
ŽEMĖS ŪKIO MINISTERIJA



Lietuvos kaimo tinklas  
LKT

## Our partners:

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**LITHUANIAN  
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