

## Joint Winter School on Bioeconomy

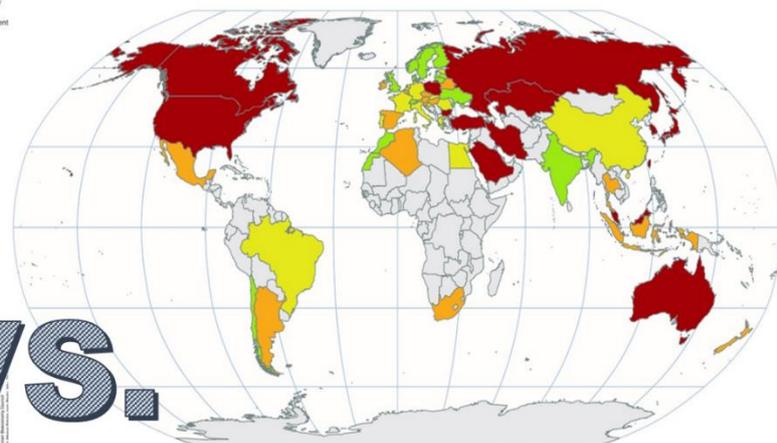
# Climate change is the problem - Is the circular-bioeconomy the solution?

Annweiler am Trifels  
23<sup>nd</sup> – 26<sup>th</sup> November 2021

**Bioeconomy Policies around  
the World**



**Climate Change Performance  
around the World**



Hosted by the *Bioeconomy Graduate Program BBW ForWerts* in cooperation with the  
*Heidelberger Center for the Environment (HCE)*

# BBW ForWerts Winter school 2021

## Climate change is the problem –Is the circular-bioeconomy the solution?

Policy initiatives such as the EU Bioeconomy strategy, the Circular Economy Action Plan or the newly launched EU Green Deal all claim to be addressing the issue of climate change. But are these policy initiatives properly equipped to help us reach our carbon emission goals? And if not, what would be needed to strengthen the climate adaptation and mitigation potential of these policies?

These are some of the questions we will be addressing during this BBW ForWerts winter school. This year, we have also partnered with our colleagues from the Heidelberg Center for the Environment (HCE) to provide participants with a broad interdisciplinary learning experience that spans over a multitude of environmental sciences.

As a special feature, we will be paying particular attention to social entrepreneurship, and its potential to unlock the power of social capital for greening the economy. Social entrepreneurship is particularly relevant within the context of a just and equitable transition towards bioeconomy, especially considering how climate change disproportionately affects the weakest in our society. Scientists and global leaders are busy seeking solutions to climate change, but another group will have to play a critical role: social entrepreneurs, or better yet, young scientists turned entrepreneurs.

So, can YOU leverage your scientific bioeconomy knowhow and apply it to the real world in order to help combat climate change?

### Format

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Impulse lectures, brainstorming discussions, project-oriented group work

### Tentative schedule

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#### **Tuesday, 23.11. 2021**

14:00 – 14:30     *Arrival and Registration*

14:30 – 14:45     *Welcome address (Dr. Tanja Peskan-Berghöfer)*

14:45 – 16:00     *PhD project presentations from all participants: 10 min each.*

*Coffee & networking, check-in (collect room keys)*

16:45 - 18:30     *PhD project presentations (continued) followed by first round-table discussion*

*Dinner & networking*

### Wednesday, 24.11. 2021

#### Topic of the day: Can we fight climate change with bioeconomy?

Impulse lectures followed by round table discussion with Dr. Joachim Kreysa (Former advisor for BioEconomy at the in-house science service of the European Commission (JRC))

9:00 - 10:00      Climate change mitigation & adaptation - main challenges  
*Dr. Max Jungmann (Heidelberg University & Momentum novum)*

*Short coffee break*

10:15 – 11:15      Bioeconomy the silver bullet?  
*Dr. Alex Giurca (HCE, Heidelberg University)*

11:15 – 12:15      Group work, kick off

*Lunch & networking*

14:30 – 16:30      Individual work (*Coffee break, flexible*)

16:30 – 18:00      Group Work, Phase I

*Dinner*

19:30 – 21:00      **Key note:** Bioeconomy in Ibero-America  
*Jun. Prof. Dr. Rosa Lehmann (Heidelberg University)*

### Thursday, 25. 11. 2021

#### Topic of the day: Social entrepreneurship in times of changing climate

9:00 - 10:30      **Key note:** Innovative business models, followed by discussion  
*Prof. Dr. Oliver Som (Management Center Innsbruck)*

*Coffee break*

11:00 – 12:30      Social entrepreneurship at work  
*Dr. Max Jungmann (Founder and CEO, Momentum Novum)*

*Lunch*

14:00 – 18:00      Group work, Phase II (*Coffee break, flexible*)

*Dinner*

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**20:00      Public event** (in German): *Trifelser Gespräch*

### Friday, 26. 11. 2021

9:00 – 10:30      Pitching of group work results

*Short coffee break*

11:00 – 12:30      Final discussion and wrap-up

*Lunch and farewell*

## Group Work Concept

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### Background

A circular bioeconomy – which turns renewable biological resources and waste streams into new products – is at the heart of the EU's efforts to cut down its carbon emissions while also maintaining economic growth. But how is climate change really addressed by the different Bioeconomy strategies? During this exercise, we will take a look at current national political bioeconomy strategies. To date, more than 50 countries around the World have produced such strategies. For example, the German government published its national bioeconomy research strategy in 2011 and its national bioeconomy policy strategy in 2014. Over the past decade, many more countries have developed bioeconomy strategies and policies based on their own prerequisites -such as the availability of raw materials and resources, research infrastructure and expertise- as well as on national political targets for climate change mitigation and economic growth. But the way the problems and solutions are framed, and how to goal of climate change mitigation ought to be achieved may differ from country to country. Some countries may for example advocate for innovation and technological fixes i.e., geo-engineering, or bio-based innovations; other countries may advocate for sufficiency i.e., less consumption, and propose circular or even de-growth approaches.

### Objective

The main objective of this two-day group work is to identify whether and how climate change (mitigation and adaptation) has been addressed in different national bioeconomy policy strategies, and to identify how the main climate-related challenges and proposed solution are framed.

The ultimate objective is to get an overview of the different approaches to climate change as presented in the different national bioeconomy strategies, and stimulate a critical discussion about these different approaches, their coherency, coordination, and potential for implementation. Special attention will be paid to innovations, and (social) entrepreneurship in particular.

### Methodology

- Participants form 2-3 groups, each group focusing on one bioeconomy strategy representative for one of the two regions: Global North and Global South.
- Participants read the selected strategy and look for references to climate change.
- In doing so, each group must answer following questions:
  - Is climate change mentioned in the selected national political bioeconomy strategy?
  - If so, what climate change-related concepts are present in the strategy (e.g., mitigation, adaptation, innovations, consumption patterns etc.)
  - Is climate change framed only as a problem or is it listed also as an opportunity in the national strategy?
  - How is the issue to be addressed (e.g., policy change, stakeholder engagement, financial incentives, social innovations, consumer awareness etc.)?
  - By whom should the issue be addressed (e.g., citizens, policymakers, industry etc)?

### Group work program in detail

#### **24. 11. 2021**

11:15 – 12:15 Group work, kick off

- Participants form groups, and select their preferred bioeconomy strategy
- The selected strategies are briefly presented and discussed

14:30 – 16:30 Individual work

16:30 – 18:00 Group Work (Phase I)

- A first brief content analysis based on the questions listed above is performed
- Presentations of individual contributions inside the group
- Drawing first conclusions

### **25. 11. 2021**

14:00 – 18:00 Group work (Phase II)

- Participants continue with the content analysis of the previous day in groups
- Exchange of what has been learned, combined with further search for information
- Preparing presentations

### **26.11. 2021**

9:00 – 10:30 Presentations of group work, reflecting on the findings of the content analysis

11:00 – 12:00 Discussion round, reflection on the findings in light of what has been discussed about climate change, bioeconomy and social entrepreneurship. Suggestions for how bioeconomy strategies and climate change efforts could be coordinated.

## **How should you prepare for this year's winter school?**

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The most important is your mindset: The success of this winter school is largely in YOUR hands. Let your curiosity and initiative drive you, be open to new questions and topics and engage actively into the many opportunities for interdisciplinary discussion.

In addition, we recommend reading the winter school booklet to be better prepared (this year it will be provided online in the run-up to the winter school). When you have additional time, we recommend reading the publications below:

Sarah Wild (2021) What is the bioeconomy and how could it help fight climate change? URL:

<https://ec.europa.eu/research-and-innovation/en/horizon-magazine/what-bioeconomy-and-how-could-it-help-fight-climate-change>

Van Renssen (2014) A bioeconomy to fight climate change URL:

<https://www.nature.com/articles/nclimate2419>

And, last but not least, also be prepared to enjoy the nice location in Annweiler.

## **What should you bring to the winter school?**

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- An electronic device with internet access for group work (laptop, iPad, etc.), wireless Internet access in the Kurhaus is free of charge
- A USB drive
- Shoes for hiking, if you plan to enjoy the nice Palatine Forest on the way to Trifels Castle.

- The willingness to explain your research interest to non-experts and motivation for understanding the research projects and challenges of other graduate students outside of your research discipline
- Readiness to engage in open discussions where there are no “stupid” questions

### **Accommodation**

Winter school participants will stay in double rooms at Kurhaus Trifels. Breakfast, lunch, dinner, as well as snacks/coffee/tee in between will be provided.



Kurhaus Trifels (Kurhausstraße 25, 76855 Annweiler-Bindersbach) is a beautiful art nouveau building located in the lovely Palatine Forest, not far from Trifels Castle.

**We are looking forward to see you in Annweiler for an entire week of immersion into bioeconomy!**

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#### ***Front-page images:***

Map 1. Overview of political bioeconomy strategies

<http://www.bio-step.eu/background/bioeconomy-strategies/>

Map 2. Climate Change Performance Index

The Climate Change Performance Index ranks countries by greenhouse gas emissions (40% of score), renewable energy (20%), energy use (20%) and climate policy (20%); red = worst; green = best

[https://commons.wikimedia.org/wiki/File:Climate\\_Change\\_Performance\\_Index.svg](https://commons.wikimedia.org/wiki/File:Climate_Change_Performance_Index.svg)