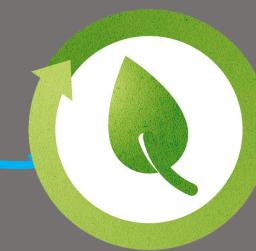




### BIOCLIMAPATHS



### Climate resilient policy-led bioeconomy pathways

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#### 5. Results: Governance for resilient bioeconomy pathways

- Advancements in social-ecological modeling of cross-sectoral impacts of climate hazards on economic structures from a spatial perspective
- Knowledge and understanding of SDG-aligned bioeconomy resilience in a climate risk context
- Actionable, policy-relevant insights and mitigation options of the potential distributive impacts of climate-affected biobased supply chains on society

## 4. Climate impact & social vulnerability: Shocking the model with spatial climate hazards

- Assessment of biobased supply shocks
- Assessment of risk transmission channels in society (supply & price risk, food security, ...)
  - Floods, droughts, fires, hailstorms, ...
- Modeling of EU climate hazard hotspots
- Spatially explicit climate hazard impact maps in line with climate scenarios
  - Problem context:
     Bioeconomy & increasing
     climate hazard risk

# 3. Social-ecological dependencies: Modeling regional bio-societies in the global resource system

- Agent-based macro-model comprising all households in Austria
- Connecting ABM to bio-based EE-MRIO
- Modeling selected sub-national economic systems (AT, GER, ES) in physical & monetary MRIO framework
   Modeling (future) biobased supply chains, origin and type of biobased inputs
  - 2. Socio-technical transitions:
    Modeling biobased supply
    chains

#### Foundation: Knowledge co-production in stakeholder focus group

- How do climate hazards affect gross primary production in agriculture and forestry, and what are (future) climate hazard hotspots in the EU?
- How are EU bioeconomy sectors affected by climate hazard hotspots under different climate scenarios and what are global biomass supply and use implications?
- Under which conditions could distributive effects (inequality) among heterogeneous households emerge and mitigated in the social system?







