Supplementary Materials: Possible Futures towards a Wood-Based Bioeconomy: A Scenario Analysis for Germany

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Table S1. List of analysed scenarios and identified influence factors.

No.	Scenario	Influence Factors
1	GEO4 Scenarios [1]	• Institutional and socio-political frameworks • Demographics • Economic demand, markets and trade • Scientific and technological innovation • Value systems
2	Land use scenarios [2]	• Regional population development • Development of renewable energies • Raw material scarcity • Public participation and volunteering • Spatial planning and regional development • Fields of public responsibilities and investments • Birth rates • International migration/refugees • Inner German migration • Rate of privatization • Resource and environment protection • GDP growth • Index for sustainable economic wealth • Development of energy consumption and supply • Consumption patterns
3	Forest Futures 2100 [3]	• Society o Social change How society deals with demographic change o Leisure time activities and tourism o Environmental awareness and behavior o Regional development and local policies o Society's valuation and use of forests o Work in the forest and its surroundings
		• Techno-logy o Innovations in the material use of wood o Innovations in the energetic use of wood Innovative harvesting methods and innovation in the supply/ provision of wood
		• Economy Globalisation and global economic development Fossil and renewable energy sources Domestic economic development Attractiveness of competing forms of land use Demand for wood Structure of the wood utilising industry Availability of raw wood Business development and qualification Demand for other forest services Ownership structure and property rights

Table S1. *Cont.*

No.	Scenario	Influence Factors	
		• Ecology	Global climate change Site conditions Forest structure Forest management Hunting
		• Politics	Energy and climate policies Environmental and nature conservation policies Technology, innovation and research policies Economic, competition, tax and fiscal policies Forest policies
4	OECD: The Bioeconomy to 2030 [4]	Population and income Demographics and human resources Energy consumption and climate change Agriculture, food prices and water Healthcare costs Supporting and competing technologies	
5	Future Scenarios for Michigan's Bioeconomy [5]	Technological development Rate of investments Policies Values and consumer behavior Availability of biomass	
6	German chemical industry 2030 [6]	Development of resource efficiency Development of innovations (to succeed in international competition) Development of labor supply, including qualified employees	
7	Global implications of biomass and biofuel use in Germany—recent trends and future scenarios for domestic and foreign agricultural land use and resulting GHG emissions [7]	Domestic production based on national biomass production Domestic production based on imported biomass Product imports	
8	UK National Ecosystem Assessment [8]	Climate change Conversion of natural and semi-natural habitats Pollution of air, land and water Overexploitation of terrestrial, marine and freshwater resources Invasive species Consumption Demographic factors Sociopolitical factors Economic factors Scientific and technological factors Cultural and religious factors	

Table S1. *Cont.*

No.	Scenario	Influence Factors
9	Scenarios of technology and innovation policies in Europe: Investigating future governance [9]	Dynamics of economic globalisation Current and future technology regimes Competition and related patterns of specialization of national, regional and sectoral innovation systems Development of a European political system as opposite pole to national and regional systems Orientation and strategies of multi-national enterprises Specialisation and internalization strategies of higher education institutions Government research institutions and technology organisations National and regional state authorities European authorities such as European Commission or European Parliament

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