

BOKU Bioeconomy Understanding - Draft

Preamble

At its core, the bioeconomy is a vision of sustainable action, a post-fossil economy focusing on the use of renewable resources. The desired rapid transformation of the economic system implies a comprehensive reshaping of economic structures and collective rules, as well as values, behaviors, and individual lifestyles, making it a political and cultural project as well. The perspective outlined in this document presents the bioeconomy as such an overarching concept. BOKU's understanding of the bioeconomy serves primarily as a guiding framework for research and teaching, respecting academic freedom, and as a strategic instrument for university administration and management, ensuring that the university's impact on society is pursued with utmost care given the urgency of action.

BOKU understanding of the Bioeconomy

The bioeconomy is fundamentally interpreted as **socio-ecologically transformative**. Its mode of operation aligns with natural laws, functioning on a **circular basis** (avoiding environmentally harmful residues), focusing on **sufficiency** (minimizing absolute consumption), and **efficiency** (minimizing relative consumption). This responsible use of resources extends beyond biogenic and renewable materials, explicitly **encompassing all types of resources**. Conflicts over resource use are minimized through thoughtful land use and spatial planning, and, when necessary, decisions are made in favor of universal basic needs, such as **food security**, while vital factors like **biodiversity** and **soil ecology** are central considerations.

These orientations necessitate specific planning and structuring of bioeconomic activities. This includes the **responsible use of technology**, a **holistic consideration of human relations to nature** during technological development, impact assessments in the production, processing, and use of resources, and the integration of current methods and insights in research and education. The bioeconomy, beyond the interdisciplinary approaches of natural, engineering, and social sciences, is primarily **transdisciplinary**, deriving essential research and orientation questions from everyday

societal experiences. Its goal is to promote a **good life for all within planetary boundaries** by integrating diverse perspectives, worldviews, needs, rights, and aspirations. This involves engaging with various value systems, norms, and behaviors, which requires addressing ethical dimensions where the needs and claims of different human societies, as well as those of non-human nature, are placed in a **responsible relationship** with each other.

The bioeconomy thus explicitly aims for global cooperation based on **fairness and justice within and across nations and generations**, fostering **participation** of all those it affects. Developing a shared understanding of the bioeconomy is already a step toward such a sustainable society.