

BOKU Bioeconomy Understanding – As of May 2025

Preamble

The bioeconomy, as a discourse on sustainable action, is in principle a post-fossil economic system focused on the use of renewable resources. The rapid transformation of the economic system aimed at by this concept entails a comprehensive redesign of economic structures and collective rules. It also affects values, behavior, and individual lifestyles, making it a societal, political, and cultural project. The perspective outlined in this document portrays the bioeconomy as such a comprehensive concept. The BOKU understanding of the bioeconomy is intended, while respecting the freedom of research and teaching, primarily as a framework for orientation in research and teaching, as well as a strategic instrument for the administration and management of the university. This ensures that the university's impact on society can occur with the greatest possible care given the urgency of the matter. The BOKU bioeconomy understanding particularly concerns the fundamental natural conditions, the scientific claim, and normative dimensions, and is understood as an ongoing discourse on this topic at BOKU.

The BOKU Understanding of the Bioeconomy

The bioeconomy is fundamentally to be interpreted as **socio-ecologically transformative**. It aligns its *modus operandi* with the fundamental laws of nature, meaning it operates in a **circular manner** (without environmentally harmful residues), focuses on **sufficiency** (minimizing absolute consumption), and emphasizes **efficiency** (minimizing relative consumption). This responsible use of resources applies not only to biogenic and renewable raw materials but explicitly includes **all types of resources**. Conflicts over resource use are avoided through thoughtful land and spatial planning and, in cases of doubt, are resolved in favor of universal basic needs such as **food security**, with life-enabling factors like **biodiversity** and **soil ecology** playing a central role.

These orientations require appropriate alignment and planning of bioeconomic activities. This includes, in particular, the **responsible use of technology** and **a holistic consideration of societal relations to nature** in its development, the examination of environmental and societal impacts during the production, processing, and use of raw materials, as well as the integration

of current methods and findings into research and teaching. The bioeconomy is not only interdisciplinary and multidisciplinary, encompassing approaches from natural, engineering, and social sciences, but is also **transdisciplinary**, drawing essential research and orientation questions from everyday experiences within societies.

It thus pursues the goal of a **good life for all within planetary boundaries** by integrating diverse life perspectives and worldviews, their requirements, rights, and desires. This involves engaging with various value systems, norms, and behaviors, requiring ethical considerations that place both human societies and the non-human natural world in a **responsible relationship** with one another. The bioeconomy explicitly aims for global cooperation, guided by **fairness and justice within and between nations and generations**, and enables the **participation** of all those affected by it. Developing a shared understanding of the bioeconomy is already a step toward such a sustainable society.