## Bioeconomy and Justice (BioEcoJust)



The Bioeconomy and Justice (BioEcoJust) project examines social development over the next 100 years, until 2125. The starting point of the study follows the hypothesis that, at the next stage of social development, bio-based solutions will replace technologies based on fossil raw materials. In the long term, we can quite possibly foresee biological resources as forming the basis for our entire economy. Such a bio-based economy, or bioeconomy, could involve sectors like forest, algae, agriculture etc. to generate new ways humans meet their wants and needs.

As a potential broad scale systemic change, new opportunities come with both risks and threats. The relationship between humans, rapidly evolving technology, and nature is changing and generating new kinds of ethical issues. Structural change also influences people-to-people power relationships. A fossil-based economy has benefited individuals and stakeholder groups and has created power positions that are threatened by the regime change. This creates political tensions that contribute to the overall societal development.

The BioEcoJust project examines the views of experts, along with megatrends and weak signals of change. The particular interest of the research is to identify surprising future ethical issues and challenges. The aim of the project is therefore to create an ethical framework that will aid in making more ethically considered decisions to ensure an open, fair and ecological future.

The study project is conducted during the period 1.1.2017 - 31.12.2020. This means that in the spring 2019 we find ourselves in the mid-point of the research. Having started the work with a thorough literature search and horizon scanning to recognize emerging issues that could have an impact on the futures of bioeconomy, the research group formulated a sense-making framework to use for the analysis of the phenomenon (figure 1.) Based on this framework, a Delphi questionnaire was formulated and sent to experts inside and outside Finland in March

2019. The second-round questionnaire is being prepared based on the expert insights received in the first round.

Future images, future ethical challenges, and other insights produced in the Delphi will serve as the basis of a series of workshops called Futures Cliniques. The outcomes and materials produced from the Delphi and the Cliniques develop into a set of scenarios in which decision points, potential actors making the decisions, and key ethical concerns driving each scenario are identified and weaved into the narrative. The main purpose of these scenarios will be to inform stakeholders of emerging ethical trouble-spots, support more considered decisionmaking concerning the development of the bioeconomy, and promote Bio-Eco Justice in action.

Professor Matti Häyry and his team at the Aalto University School of Business will, based on the work of the futures studies team, identify the decisions and agents who are judged to be causally responsible for choices on bioeconomy. By using the core philosophical methods of explication and interpretation, they will list the conditions on which causal responsibility can be seen to imply moral responsibility and present the implications that this has on the justice of the choices made. To disseminate the results, the consortium will organise academic meetings; general lectures; panels with the Parliamentary Committee for the Future, with members of the parliament; and a seminar with the Standing Committee for Foresight in the Prime Minister's Office.

## For more information:

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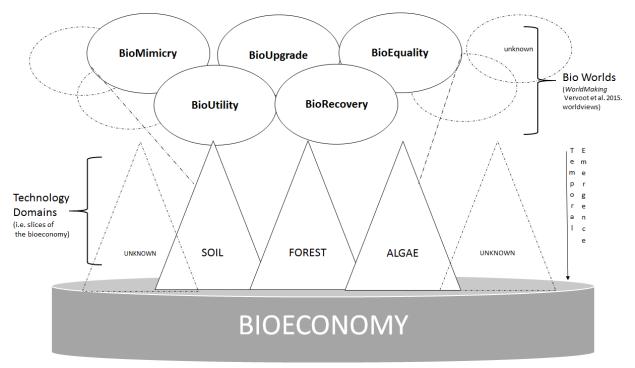


Figure 1: Framework for the analysis of the phenomenon.