

Day of Life Sciences, Biotechnology, and Bioeconomy hosted by Association LithuaniaBIO

LIFE SCIENCES AND BIOTECHNOLOGY SECTOR COMMUNITY WORKSHOP

“LEVERAGING GENETICS TO INCREASE BIOECONOMY RESILIENCE”

Date: 13 May 2026

Venue: Lithuanian Academy of Sciences, Gedimino Avenue 3, Vilnius

Participants

In total, the presentations and panel discussion on leveraging genetics to increase bioeconomy resilience gathered 58 participants from Lithuania and abroad.

11 participants were from bioeconomy innovation clusters. Meanwhile, other 20 participants represented individual business companies and another 20 participants were from research organisations, all involved with life sciences and biotechnology. Also, 7 participants were from governmental institutions supporting research and innovation.

Apart from Lithuanian participants (45), the event was also attended by participants from Poland (2), Sweden (1), Netherlands (1), Belgium (3), Hungary (1), Slovenia (2), Bulgaria (1), and Greece (2).

Key takeaways

The application of genetic techniques in the field of bioeconomy is receiving increasing attention. Environmental challenges and consumer demands create a growing need for advanced solutions to effectively analyse and improve plants, both in terms of their adaptiveness and other desirable traits.

While there is optimism that the EU regulatory environment for the application of genetic methods in the bioeconomy will improve in the near future, regulatory obstacles still pose the greatest challenge. First of all, restrictive regulations not only hinder certain activities, but also reduce access to financing. It was unanimously agreed that there should be no compromises on safety. However, current regulations are focused on methods instead of final product safety.

Regulatory barriers lead to a systematic lagging behind, from the development of research services to the development of marketable solutions. Although the use for the purpose of analysis is not restricted, this systematic lagging behind reduces the speed of development, including the availability and cost-effectiveness of related services. Notably, due to the greater demand in agriculture, the field of genetics is more advanced there compared to forestry.

One important area for improvement is to further increase awareness and acceptance among various stakeholders, including not only policymakers but also bioeconomy businesses and the wider public. Scientific evidence and tailored communication to the target groups can help. Yet, a more effective way could be to demonstrate real-life solutions and products.

Finally, interdisciplinary and transnational cooperation could foster the development of genetic techniques and their application in the bioeconomy. This is especially important for data collection and sharing. DIVERSE_GENE_WATCH is a great example, since the initiative integrates different disciplines (forestry, genetics, remote sensing) and combines the efforts of countries across the Baltic Sea Region.