Global Greenchem
Innovation & Network Program

WEBINAR

# BIOPLASTICS AND SUSTAINABLE PRODUCTION: IMPACT ASSESSMENT AND DEVELOPMENT PROSPECTS

Global GreenChem Innovation and Network Program

AGENDA

# REGISTRATION

**25 March 2026**

**14:00 – 16:00**

**Format:** online Teams
**Language:** Ukrainian

**WEBINAR**

**BIOPLASTICS AND SUSTAINABLE PRODUCTION: IMPACT ASSESSMENT AND DEVELOPMENT PROSPECTS**

25 March 2026, 14:00–16:00, online Teams

# AGENDA

**Trainer:** Oleksandr Khokhotva, Chemical Management Expert, Resource Efficient and Cleaner Production Centre

| Time | Item |
|---|---|
| **14:00-14:10** | WELCOMING REMARKS |
| **14:10-15:20** | CONVENTIONAL PLASTICS VS BIOPLASTICS: BASIC CONCEPTS |
| | ENVIRONMENTAL IMPACT: THE LCA APPROACH |
| | BIOPLASTICS IN INDUSTRY: REAL-WORLD CASE STUDIES |
| | SUSTAINABLE MATERIALS |
| | REGULATORY AND STRATEGIC TRENDS |
| | PRACTICAL TASK |
| **15:20-15:50** | Q&A SESSION |
| **15:50-16:00** | WRAP-UP OF THE WEBINAR |

**Objectives of the webinar:**

- Deepen understanding of the fundamental differences between conventional plastics and bioplastics, including their feedstock base, properties, and areas of application.
- Introduce the environmental aspects of bioplastic production and use, particularly through the Life Cycle Assessment (LCA) approach and analysis of actual environmental impacts.
- Develop a systemic understanding of the environmental, resource-related, and technological aspects of bioplastic production and application within the context of sustainable development.
- Present real industrial case studies on the implementation of bioplastics and other sustainable materials across various sectors.
- Provide an overview of current regulatory and strategic trends in the field of sustainable materials and the circular economy.
- Develop practical skills in assessing the feasibility of using bioplastics in specific products through a practical assignment.

**Participants**

The event is open to all stakeholders interested in and engaged in issues related to the chemical sector, green chemistry and engineering, sustainable industry, the circular economy, resource efficiency, and environmental protection.

Participation is invited from representatives of industrial enterprises, central and local authorities, expert organizations, business associations, civil society organizations, as well as educational and research institutions.

**Organizers**

The webinar will be organized by the RECP Centre in Ukraine in close collaboration with the Center for Green Chemistry & Green Engineering at Yale University under GEF-funded UNIDO project "The Global GreenChem Innovation and Network Programme".

**Practical information**

The webinar will be organized online on the 25 March 2026, 14:00-16:00 (EEST) using Teams platform. The agenda includes a presentation, followed by discussions with all participants. The event will be conducted in Ukrainian.

To participate in the webinar, interested participants should pre-register by following the link.

**Background**

Polymeric materials (plastics) are an integral part of the modern economy and are widely used across various sectors — from packaging and the agri-food industry to healthcare, textiles, and mechanical engineering. At the same time, the growing volumes of plastic production and waste accumulation generate significant environmental challenges, including greenhouse gas emissions, depletion of fossil resources, and environmental pollution.

In response to these challenges, alternative materials are being developed, including bioplastics, which are considered one of the pathways toward more sustainable production models. However, their environmental profile depends on a range of factors, including feedstock origin, processing technologies, logistics, conditions of use, and end-of-life management scenarios. Therefore, Life Cycle Assessment (LCA) serves as a key tool for the comprehensive evaluation of material-related environmental impacts.

The webinar is dedicated to a systematic overview of bioplastics in the context of sustainable production. Participants will explore basic polymer classifications, approaches to impact assessment, practical examples of industrial implementation, as well as the broader landscape of sustainable materials and strategic industry trends.

**About the GreenChem**

The Global GreenChem Innovation and Network Programme (GreenChem) aims to strengthen the sound management of industrial chemicals and their waste through better control, reduction, and/or

elimination protocols, and specifically to scale up green chemistry solutions for persistent organic pollutants (POPs) and mercury replacement through capacity building, innovation, and the creation of a global green chemistry network fostering visibility, support, and implementation.

The project is funded by Global Environment Facility (GEF), implemented by the United Nations Industrial Development Organization (UNIDO) and executed by Yale University in close collaboration with governmental counterparts of six beneficiary focus countries (Indonesia, Jordan, Peru, Serbia, Uganda, and Ukraine).

In Ukraine, the Resource Efficient and Cleaner Production (RECP) Centre is the national partner in implementing "Global GreenChem Innovation and Network Programme". Here, the Programme components:

- *Component 1. Green Chemistry Innovation and Inclusion Network for Capacity Building.* It aims at the development of a robust Global Green Chemistry Innovation and Inclusion Network, connecting collectives and individuals, including scientists, entrepreneurs, and representatives from government, industry, academia, and non-governmental organizations.
- *Component 2. Green Chemistry Accelerator Programme*. The Programme focuses on the establishment and execution of six (6) multi-year accelerator programmes, providing support and training for sustainable businesses and business ideas in the area of green chemistry, nurturing regional innovation ecosystems in the focus nations.
- *Component 3. Green Chemistry alternatives for persistent organic pollutants (POPs), and mercury for upscaling and replication.* It demonstrates green chemistry alternatives and capacities in selected chemical & waste related focus sectors.

For more information, please visit www.globalgreenchem.com and www.chemistryforsustainability.org