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PARTNERS



plastice

Innovative value chain development for sustainable plastics in Central Europe

PARTNERSHIP

This project brings together 13 partners from four countries in Central Europe and is coordinated by the *National Institute of Chemistry, Ljubljana, Slovenia*. The partners are: **Slovenia** (Slopak d.o.o., Plasta d.o.o., Mercator d.d. and Centre of Excellence PoliMaT), **Slovakia** (Polymer Institute of the Slovak Academy of Sciences, Slovak University of Technology in Bratislava and HrKo Holding), **Italy** (University of Bologna, ASTER S. Cons. P. A. and Novamont SpA), and **Poland** (Polish Academy of Sciences Centre of Polymer and Carbon Materials and Polish Packaging Research and Development Centre).

PROJECT DURATION

3 years: April 2011 – March 2014

This project is being implemented through the CENTRAL EUROPE programme co-financed by the ERDF



HrKo Holding, a.s.



Plastics aligned with nature



Plastics aligned with nature

PROMOTING NEW ENVIRONMENTALLY FRIENDLY, SUSTAINABLE
PLASTIC SOLUTIONS

The focus of the project is on the identification and removal of barriers to the faster and more widespread use of sustainable types of plastics, particularly biodegradable plastics and plastics based on renewable resources, in Central Europe.

INTRODUCTION

The unstoppable growth in plastics use has brought with it a growing environmental burden—from the perspective of resource use, emissions released during the production stage, and waste management. If we want to control and reduce these negative impacts on the environment it is essential that we move to the production and use of plastics with a higher level of sustainability, in particular **biodegradable** and **biobased plastics**.

The industrial sector with the greatest immediate potential for the use of biodegradable plastics is the **packaging sector**. However, biodegradable plastics can also be used in a number of other disposable or single use applications intended for general use (disposable plates and bowls, cold drink cups, cutlery) or specialized applications (sporting accessories, agriculture). There is considerable potential for the use of plastics partially or fully based on renewable resources – **biobased plastics**.

Central Europe currently lags behind in biodegradable plastics production and use. The region does not possess large-scale production capacity and the use of these materials is marginal. The causes of this range from a lack of legal recognition, the higher prices of biodegradable plastics, and the setup of waste management schemes, to most importantly, confusion and mistrust among end-users due to the often contradictory information available on plastics and biodegradable plastics.

On the positive side, Central Europe has a strong scientific base in the field of biodegradable polymers, which needs to be better utilized.

OBJECTIVES

The international project PLASTiCE - “Innovative value chain development for sustainable plastics in Central Europe” is devoted to the promotion of new environmentally friendly and sustainable plastic solutions.

The focus of the project is on the identification and removal of barriers to the faster and more widespread use of sustainable types of plastic, particularly biodegradable plastics and plastics based on renewable resources, in Central Europe. The specific objectives are:

- Raising awareness among target groups regarding biodegradable plastics
- Improving technology transfer and knowledge exchange mechanisms in biodegradable plastics end-user industries
- Improving access to scientific knowledge and the use of already existing knowledge as well as adapting this knowledge to the requirements of biodegradable polymer and plastics producers
- Intensifying application-oriented cooperation between research and industry.

EXPECTED RESULTS

- Introduction of **National Information Points** in all four participating countries that will offer unbiased and scientifically supported information about sustainable plastics to consumers and industrial users.
- Development and dissemination of an **information toolkit**.
- Creation of a **certification system** for compostable plastics developed in Slovenia and Slovakia.
- Creation of a **roadmap** for research and commercialization of new biodegradable polymers that meet overall market expectations and will therefore enable the transition to sustainable plastics.

By joining the relatively strong centers of knowledge on biodegradable materials from different countries in the region and combining them, this project has a well-rounded scientific support.

By providing information, regulatory support and by involving the complete value chain (producer, converter, end user), we aim to overcome the current obstacles to sustainable plastics production and use experienced in Central Europe and elsewhere.