

eCircular Flagship Styrian Regional Hub on Plastic Waste Prevention

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Plastic materials play a vital part in today's life. Many inventions and modern technology from transportation, communication, medicine and packaging would not be possible without the outstanding properties of plastics which is light weight, chemically and mechanically stable and easily formable in all shapes. Combined with economically interesting issues plastics are today's preferred construction material.

However, there are still many questions to be answered. Plastic is a completely new material, which has not existed in nature before. When plastics end up in the environment, they may cause severe problems. One of the ways of preventing littering and related issues is using only the most efficient amount of plastics for the application and avoiding waste along the value chain.

Starting at the beginning of the value chain, design for recycling is required. Nearly all products today are optimised for either production or usage. Disposal or even recycling is quite neglected. Streamlining the production processes to avoid scrap is an important step in preventing plastic waste.

The last step involves the end-user. A significant problem is the separated collection of municipal waste which depends on the mindset of the citizens. Waste is still regarded as useless and worthless instead of being considered a valuable resource. In this regard, still a lot of work has to be done to win the citizens over.

The prime objective of the project eCircular is the reduction of plastic waste along the value chain. The project aims to support companies and organisations in their effort to reduce plastic waste. This includes establishing regional hubs as a central focal point where interested parties can turn to with their demands and needs.

The eCircular Flagship Styrian Regional Hub on Plastic Waste Prevention facilitates the discussion, identification of barriers and suggestion of possible solutions for the prevention of plastic waste. Starting with a focus on the Styrian regional level, it enlarges the interconnection with the Austrian context and links with other Regional Hubs in Europe like those in Italy and Germany.

As part of the eCircular European network of Regional Hubs in the year 2019, the Styria region has been in focus. The work was dedicated to plan and initiate a regional hub with a stakeholder network. This hub shall offer support and facilitate interaction and discussion among the interested parties, like producing industry, local government, communities and NGOs regarding questions about the possibilities for plastic waste prevention.

Initial identification of stakeholders has been conducted in 2019. For instance, the collaboration with the Climate Change Centre Austria facilitated the participation of Montanuniversität Leoben (MUL) in the Climathon 2019 Graz, the capital city of Styria. In the framework of eCircular, a challenge on plastic waste prevention with a focus on Urban Areas was presented by MUL at the hackathon, resulting in three start-up ideas presented.

As a continuation of this work in 2020, the stakeholder network of the Styrian Regional Hub is being enlarged and the existing collaborations strengthened. For instance, thanks to the support of the Styrian Regional Hub, WWF Austria will serve its expertise for a workshop on plastic waste prevention during the international EIT Climate KIC Summer school “The Journey”, taking place in a “virtual Leoben” in July 2020. The Climathon 2020 will also be hosted by MUL in Leoben, the first time to be representing the Climathon initiative in the Styria region. Supported by the eCircular Styrian Regional Hub, a challenge dedicated to the topic of plastic waste prevention is planned. The sponsors for this challenge are being identified among the stakeholders’ network of the Styrian Regional Hub.

Another activity at the centre of the work of the Styrian Regional Hub in 2020 is to invite targeted stakeholders to a dedicated Workshop on Plastic Waste Prevention in September 2020 to identify barriers and opportunities in the Styria region. The hub's network of stakeholders is also explored for contributing to the MUL's CirCOOL 3.0 Summer School, dedicated in 2020 specifically to the life cycle of Polymers. In this way, actions on plastic waste prevention at a regional level relate to international initiatives thanks to the linkage provided by eCircular Flagship.