In the Circular Economy, All Waste is Valuable

By Jaana Kuula, City of Heinola

The RELE project in Heinola is exploring an energy and circular economy model suitable for the region. It's not just about ensuring that the city, businesses, and households have enough electricity, heat, and fuel, or that used goods are sent for reuse and waste is burned. The energy sector and circular economy represent significant business areas, whose importance and economic value are also growing in Heinola.

According to the basic principles of the circular economy, waste should not be generated, nor should it remain after processing. However, something is almost always left over. The key issue is how the value of this surplus is perceived and what is done with it. All waste contains valuable energy, nutrients, precious metals, and other materials that can be used in the production of new products and services. Even municipal sludge, which is flushed down the toilet, is a source of many important products and energy.

Further Processing of Waste Increases Material Value

There are already developed methods for recovering and further processing valuable materials from waste, but they have not been sufficiently adopted. The simplest and most inefficient option for waste treatment is dumping it in the ground or burning it. Finland has been criticized by the EU for its waste incineration practices, as the contry burns more recyclable waste compared to other countries. While the average incineration rate in EU countries is 26%, in Finland, nearly 60% (about 57.9%) of waste is incinerated. To address this situation, Finland should transition to cleaner energy sources across the country.

Sharing Experiences is Beneficial

Experience sharing is also valuable in the circular economy, and during 2024, Heinola's RELE project has had the opportunity to exchange ideas with many domestic and international actors at various events. One interesting waste management event was the five-day international WASTE project visit to Lahti, which concluded with a seminar on August 20 at the Lahti Sports Center. In addition to foreign speakers, RELE project manager Jaana Kuula also gave a speech at the event about waste management and the circular economy. The practical arrangements for the visit and seminar were organized by the EKE association based in Vierumäki, with Tapani Frantsi as the chairman.

Finland is Almost at the Top in Packaging Waste Collection

At the WASTE seminar, discussions arose not only about waste incineration but also about EU reports comparing recycling rates for different packaging materials in various countries. Finland's low recycling rate for plastic packaging (39.4%) attracted attention, especially since Finland has a record-high return rate of 92% for plastic bottles. Finland's recycling rates for glass bottles (97%) and aluminum cans (96%) are also very good.

Questions arose from the comparison data about why some countries fail to collect enough glass for recycling, even though at the same time, 85% of EU member states collect cardboard, 82% collect metal, and 67% collect aluminum according to EU targets. The worst situation is in plastic collection, where as many as 70% of member states fail to meet the EU targets. Only six EU countries — Belgium, Estonia, Germany, the Netherlands, Slovenia, and Sweden — are able to meet all EU collection targets for packaging materials. Finland falls just short, meeting targets for all packaging materials except plastic.

Strict Criteria in Malta

One of the most memorable presentations by visitors was given by a mayor from Malta, who spoke about the strict waste collection and sorting regulations that must be applied not only to their residents but also to the influx of tourists. The small island nation cannot cope with the waste burden generated by double the population in tourists (1 million visitors annually) without strict cleanliness regulations. It was also encouraging to see presentations by young students from Malta, who had been invited to share their own experiences of recycling in the WASTE project seminar in Finland. Young people's views are important, as circular economy activities impact more on the living conditions and resources of the future generations than on the current ones.

For more information on the WASTE project's visit to Finland, you can refer to the provided link: <u>https://wastenetwork.wordpress.com/2024/08/31/fifth-international-event-in-finland/</u>.