

THE IMPORTANT ROLE OF LANDFILLS IN THE CIRCULAR ECONOMY

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Abstract

Circular economy is about creating an economy where the resources we take in use, is kept in circulation (recycled) after end of use rather than being burned in an incinerator or end their life in a landfill.

Disposal and Landfilling is not always the worst option, and European countries that still landfill 70-80% is not a sustainable solution. It is a fact that landfilling of waste contributes negatively to the environment and climate agenda, but is mainly because some countries still allows depositing of biodegradable waste that produces landfill gas such as methane. Contaminated leachate and other environmental pollutants, we can basically manage and treat properly, if you are committed to operating the plants optimally and comply with national, European rules and standards.

As long as hazardous substances can accumulate in the environment and still is permitted for use in products and goods, as long there will be a risk that the substances is released into the environment when they are subsequently reused or recycled.

We as a society have a commitment to phase out and eliminate these substances (possibly the entire product) from the circulation and the economic cycle. But unfortunately this principle doesn't work very well with the objective of promoting recycling at any price and the circular economy, where as much as possible should go back into the circuit.

There are many advantages (and necessities) connected to the circular economy. In Denmark and some other countries, it is old wine in new bottles. Recycling and reuse is not new to us. Focusing on fulfilling European recycling targets without at the same time ensuring the quality of recycling can lead to an unacceptable impact on the environment and human health. The hazardous and harmful substances must as soon as possible be removed out of the "circulating" stream

The circular economy and way of thinking must be combined with opportunities for decontamination and disposal of heavily contaminated flows, which it from an overall resource point of view does not pay to treat and "recycle". At that point landfills play an important and natural role in the circular economy, and contributes to better resource management of materials that should not be, can or should be recycled and which MUST be removed from the recycling circuit and -cycle.

The vision and thinking of no waste going into landfills is beautiful but also unrealistic. Instead of considering the landfill of waste as a problem, we need to think in new directions and developing the area and strategies where landfills are incorporated and get a place in the circular thinking, which my presentation will focus on.

Keywords

Landfill, Landfill Mining, Temporary Storage, Landfill Aftercare, Risk assessment, Circular economy, Landfill strategies