Hazardous substances in a circular economy

Executive summary

Health Council of the Netherlands
The Netherlands has great ambitions for realising a circular economy. In January 2017, the Dutch government and the business community agreed, within the framework of the Raw Materials Agreement, to ensure that in 2050 the Dutch economy would be dependent solely on the use of recyclable materials. It’s not yet clear what the circular economy will look like; the government is currently actively involved in structuring the transition from a linear to a circular economy. The Council considers it important, particularly now during this transitional phase, to focus on the question of how the health of the population can become an integrated part of the manner in which the circular economy is structured. How can we ensure, insofar as possible, that recycling does not lead to hazardous substances ending up in products with which humans come into contact?

A circular economy will not be based on recycling alone, but the fact remains that more recycling will take place in a circular economy than in the current one. Recycling can lead to risks. If, via recycling, hazardous substances such as flame retardants, plasticisers, and printing ink unintentionally end up in toys or food packaging for example, it can lead to potentially adverse health effects.

However, increased recycling does not necessarily mean that such types of risks will also increase. The fact that the transition to a circular economy demands a new organisation of the economic system actually creates an opportunity to structure it in such a manner that health risks are prevented insofar as possible.

For example, the Health Council sees opportunities for risk prevention by improving the regulations that apply to recycling. The European Commission recently drew attention to shortcomings in legislation and regulations and aims to encourage a broad debate on possible solutions. The Health Council advises the State Secretary for Infrastructure and Water Management to attach a high priority to participation in this debate and to focus on public health within that context.

Knowledge development also offers opportunities for the prevention of health risks, in particular knowledge about which hazardous substances are present in the raw materials for recycled products and how these substances can be measured, monitored, and eliminated.

The Health Council sees the greatest opportunities for the integration of risk prevention in the necessary modifications to the economic system that are now being developed. For example, in designing a product, one can already take into account the fact that the product should be suitable for a lengthy and safe use and for reuse. This principle is referred to as circular designing. Another promising development is making services available instead of products. If manufacturers are responsible for the entire chain, in other words not only for production but also for aspects such as repairs and recycling, then the products will be used more efficiently and will not end up in the waste chain as quickly.
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The Health Council receives most requests for advice from the Ministers of Health, Welfare and Sport, Infrastructure and Water Management, Social Affairs and Employment, and Agriculture, Nature and Food Quality. The Council can publish advisory reports on its own initiative. It usually does this in order to ask attention for developments or trends that are thought to be relevant to government policy.

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