

Credibility of scientific expertise and decision-making

New challenges for health risk governance in a changing world

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ABSTRACT BREAK OUT SESSION - TUESDAY 2ND FEBRUARY 2021

6 - (Re)Framing circular economy: What place for a systemic understanding?

Louis Laurent (INRS), chairman, Charles Bodar (RIVM),
Clark Miller (University of Arizona), Walter Stahel (Product Life Institute)

Circular economy is often considered the solution to address the scarcity of planetary resources. It implies waste recycling, eco-design, possibly reduced consumption. It is often associated to bio-economy – which integrates environment as an integral part of the loop. More generally, circular economy is a priori based on a systemic approach; however, it has not been completely implemented so far. It implies to take into account:

- Economic issues. In a neoliberal system, circular economy can be developed only if it is competitive, even if external cost can be taken into account through public regulation. The economic aspects may also influence the flows of materials between the states, depending of local labour costs.
- Environmental issues. The positive outcome from recycling in terms of resources consumption can be reduced by energy consumption and transport. Besides, recycling can pollute.
- User behaviour. These depend on various factors, such as costs, ease of use and disposal, representations of risks, etc.
- Health risks. Recycling materials has a positive effect but it can induce recycling of chemicals or biological contaminants. This can induce new risks for consumers as for the workers. Hazards can also arise from illegal use of waste. Furthermore, regulation at various level of public action can be conflicting.

In particular, the health agencies are facing these challenges. They should adapt risk assessment and prevention methods, by deeply integrating the systemic dimension of circular economy, encompassing environmental, public and occupational health, as well as economic aspects.



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