

Guidelines for a Circular Economy

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Definition

The circular economy is part of a resource-efficient, sustainable way of life and management, encouraging the implementation of the UN's agenda 2030 for sustainable development and respecting planetary boundaries.

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Scope

The concept of a circular economy encompasses not only traditional waste management, but all phases of material and product life cycles. It must be viewed from a global perspective, including cross-border flows of raw material, goods and waste and their associated ecological and social effects as well as long-term aspects such as goods stocks and resulting material flows.

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Objectives

The circular economy helps to protect natural resources and the climate, as well as the environment and human health, following the precautionary principle. In addition, it aims at securing raw material supplies. The circular economy is meant to reduce negative impacts along the life cycle of materials and products – by economising on primary materials and substituting them with secondary materials – and reduce waste generation and waste management.

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Measuring expenditure

The expenditure for circular economy measures should be compared to the expenditure of the primary raw materials industry with associated environmental impact, including external social and ecological costs for producing the same amount of materials or goods.

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Material cycles

The circular economy aims at managing materials in same or higher value cycles so that primary materials can be replaced by secondary material of suitable quality, thus economising on primary material. However, cascading use and final removal of materials is required to achieve the objectives (3) and expenditure criteria (4).

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Prevention

Avoiding the generation of waste and residual materials is generally preferable to recycling, as the latter is always associated with loss of material and the use of energy. Prevention measures must be evaluated in terms of achieving the objective (3) and expenditures (4) required.

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Design

Designing products for a circular economy means retaining the functional and economic value of products, their components and materials as long as possible in order to minimise negative impacts on humans and the environment. Design concepts should sustain the reorganisation of ways of production and consumption within society. Optimum design must be evaluated in terms of achieving the objective (3) and expenditures (4) required.

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Pollutants

Bringing products into circulation substances that pose an unacceptable risk to human health and the environment must be avoided. If such substances cannot be substituted, are contained in the secondary material or are only later identified as harmful, the material must be destroyed or stored safely in sinks. Alternatively, after weighing up the objectives (3) and expenditure (4), they can also be transferred into safe cycles that prevent the accumulation of harmful substances.

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Responsibility

In a circular economy, all players within product life cycles and along material value chains bear responsibility for achieving the objectives of the circular economy. The assumption of responsibility must be legally enforceable in case it is not adequately fulfilled.

For more details, download our brochure here:



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