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Rethinking Food Waste Within the Concept of BioWEconomy to Support Green Recovery From the COVID-19 Pandemic

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Abstract

The spread of the COVID-19 pandemic has generated a health crisis and repetitive lockdowns that disrupted different economic and societal segments. The world has placed hope on the vaccination progress to bring back the socio-economic “normal,” and herein we will explore how the bioeconomy can enhance the resilience and sustainability of bio-based, food, and energy systems in the post-pandemic era. The pandemic occurred in a time when the EU policy agenda was taking a powerfully transformative shape: The European Green Deal, committed to foster sustainable development and achieving the targets of the Paris climate agreement, has specified respective goals, tools, and timelines. Rather than deviating from this pathway, the COVID-19 crisis shows that a system change is needed. As the EU and the rest of the world begin to emerge from lockdowns and plan recovery, respective strategies, and contingency plans to manage further waves of the pandemic, attention must return to addressing the climate crisis and building resilience – and in that, the bioeconomy has a role to play. However, to be socially accepted widely, the bioeconomy needs to rely increasingly on 'circular' feedstocks from bio-based residues and wastes to reduce dependency on crops that compete with agriculture/food markets. Food waste represents a valuable option as it allows for producing a broad group of biobased products ranging from biofuels to bioplastics. Transformation also requires working with people in active roles, considering their capacities to think and speak about the transformation. This is why social aspects (e.g., culture, arts & fashion), but also biocities, rural bioeconomies & key sectors like tourism are of high importance. A circular, sustainable, and transformative BioWEconomy can mitigate severe & likely risks, e.g., food security, water crises & climate change.

Keywords: COVID-19, pandemic, bioeconomy, BioWEconomy

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