




Editorial

Sustainability—Special Issue “Resources and Waste Management”

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“Waste is a resource, but not in the correct place” is a widely known proverb among scientists. A huge increase in articles since the beginning of this century shows that this idea has caught on among experts dealing with the recycling of waste and the quality and use of secondary resources. Often, though, these articles only discuss how recycling can be performed and the techniques used to do so. The connection between the reuse of resources from waste and energy consumption, climate impact, the re-mobilization of pollutants and other issues are rarely explored. Ultimately, the question arises: What is the contribution of the respective recycling solution to sustainable development? Circular economy approaches mostly include recycling activities, and save resources with numerous other strategies, e.g., repair, refurbishment or reduction in material use. We are delighted to present a range of papers that address the nexus between waste, energy and resources, most of which are complemented by the economic efficiency of the processes involved. Some studies focused exclusively on recycling processes suitable for the respective region, such as products made from the water treatment sludge of a coal power plant (contribution 1), land reclamation in a heavily polluted area (contribution 2) and RDF created from industrial waste (contribution 3). Limits to recycling with a focus on PVC and potential steps for its regulation are discussed in contributions 4 and 5. Contribution 6 describes ways to improve recycling of food waste in Serbia (a non-EU country) when EU rules would be adopted. Strategies beyond recycling are also promising from an economic perspective, especially under suitable conditions. This is demonstrated by comparison between reusable and disposable packaging based on existing business models (contribution 7), and several product-service systems for light electric vehicles (contribution 8), durable and recyclable textiles for professional use (contribution 9), as well as the application of a tool for stakeholder cooperation, aiming at more sustainable construction works (contribution 10). Future perspectives for the design of refrigerators to save resources during their life cycle and after the use phase within the framework of a product-service system are presented in contribution 11. This booklet is complemented by a review of “Circularity” and its impact on cities (contribution 12). Strategies for the recovery of resources must be economically viable and ecologically sound. There is a long and winding road towards more sustainable management of resources as described by the papers in this Special Issue, but we can confidently continue on this path if we keep the relationship between waste, resources, energy and the climate in mind.

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