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Editorial

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Editorial

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Although waste management strategies have evolved to focus more on sustainable options such as reduce, reuse and recycle, landfills continue to be an important end-of-pipe treatment technology commonly used around the world. Mining of closed landfills has become an important contemporary issue in environmental engineering for multiple reasons. Mining old landfills not only frees up more space for new waste, which is helpful in a time where getting new permits or land for disposal is becoming extremely difficult, it also provides a secondary avenue to recover energy and materials from old and stabilised waste. Within this context, enhanced landfill mining (ELFM) has gained great impetus in recent years. ELFM can be applied in a landfill after using the biogas for power generation, with the subsequent reduction of fugitive emissions, earning of carbon credits and reduction of environmental pollution. Recovery of material and energy through ELFM helps landfills to be an active partner in our transition into a circular economy.

Considering the papers published in this themed issue, however, it is evident that landfill management and landfill mining approaches vary from place to place depending on the site-specific conditions. First, Meegoda and de Souza (2020) present a Briefing about the appropriate destination of food waste and the benefits and challenges of removing waste from MSW before landfill disposal. Two of the published papers by Mandpe *et al*. (2020) and Karimpour-Fard *et al*. (2020) focus on landfill mining applied to old dumpsites and landfills for recovering materials and energy from municipal solid waste (MSW). The work of Scott *et al*. (2020) focuses on landfill reclamation – the reclamation of closed landfill areas for an alternative use – whereas Naveen and Goel (2020) present an interesting hazard decision model based on source–pathway–receptor relationships that can be used for priority lists generation for remedial and emergency actions.

We hope this themed issue stimulates the discussion and the adoption of landfill mining and landfill reclamation as alternatives for recovering dumpsites and old landfill areas, helping to preserve the natural resources, creating new sources of materials and energy and optimising the land use.

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