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Editorial

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Editorial: Our future begins here and now

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On behalf of the Editorial Board of *Waste and Resource Management*, it is my privilege and honor to welcome our readers to our first issue of 2023. It was seventeen years ago when the journal was launched and became part of the *Proceedings of the Institution of Civil Engineers* to reflect the growing importance of waste and resource management in the civil engineering and construction industry. To date, the paper by Adams *et al.* (2017) on the awareness, challenges and enablers of circular economy in the UK construction sector is one of its most cited articles. The range of subjects since then have been expanded with a diversity of topics including the principles of circular economy and waste management research and practices not only in high-income countries but also in low- to middle-income countries.

The paper by Wilson *et al.* (2013), which is one of the most-read articles from this journal, underscores the importance of both the physical components and soft governance aspects in seeking locally appropriate and sustainable solutions to waste management problems in developing countries. Waste management practices do vary significantly depending on the income level as open dumping is still prevalent in lower-income countries and regions where sanitary landfill is not available. Moreover, the trajectories of waste growth by 2050 in the fastest growing regions, such as Sub-Saharan and North Africa, South Asia and Middle East, will have huge implications for the Sustainable Development Goals (SDGs). Note that in these regions, more than half of the total waste generated is open dumped.

In November 2022, Egypt, as the host of the 27th Conference of the Parties (COP27), launched a *Global Waste Initiative 50 by 2050* (UN, 2023). This sets the ambition to recycle and treat at least 50% of waste produced in Africa by 2050, and thus would increase the global waste treatment rate by more than 10%. Such an initiative recognises the value of supporting environmentally-sound waste management to reduce greenhouse gas emissions and reduce the overall effects of waste pollution on human health, food systems, biodiversity and

resource scarcity. Promoting circular economy as a climate change mitigation strategy is also expected to emerge from this initiative.

One of the papers featured in this 2023 issue is a case study done in the second most-populous country in Africa. This article by Gebreyessus *et al.* (2023) provides a comprehensive review of the waste management guidelines, policies and practices in Ethiopia. The article then provides an evaluation of the status and challenges of healthcare waste management during the Covid-19 pandemic using mixed methods of questionnaires, spot-check observations and systematic review of documents. The authors underscore the lack of pertinent healthcare waste management documentation and structured chain of communication regarding waste management in the country. Thus, we need more research like this with socio-economic considerations as the waste management situation is constantly evolving, and the lack of reported documents and data thereof could play a critical barrier in crafting actionable policies for the local context.

Next, let us go to Iran, where Khabaz Meherjardi *et al.* (2023) demonstrate an alternative pathway for disposing cigarette butts by utilising this waste as an additive to asphalt concrete. Performance of the modified asphalt mixture with different amounts of cigarette filter was investigated through several laboratory tests such as that of thermal capacity, ageing, moisture damage, resilient modulus, among others. The article provides some evidence on the effect of adding cigarette filters to improve the moisture resistance of asphalt mixture and also enhance its flexibility. We hope that one will not misconstrue the creation of new value or application for the cigarette filters as leading to the promotion of cigarette smoking, but such concern should not also be taken for granted. In addition to in-depth technical papers, we welcome more contributions from academics and practitioners on the life-cycle analysis and whole systems approach in the construction sector wherein not only the direct benefits but also the unintended consequences

of particular technology, policy and waste management practice can be explored and made explicit. For example, the rebound effect in circular economies could occur as we introduce new solutions to increase resource efficiency, which may have a negative unintended consequences, such as increasing the overall environmental impact of the system due to behavioral and systemic responses.

As always, I hope you find the content of this issue informative, stimulating and insightful. Indeed, the journal will continue to publish articles covering multidisciplinary areas built from scientific evidence and sound engineering principles to inform policy and practices for sustainable waste and resource management. The *Waste and Resource Management* journal publishes its most recent articles Ahead of Print on its Virtual Library homepage (<https://www.icevirtuallibrary.com/toc/jwarm/current>) allowing you to keep up to date with the latest papers.

A final thought for 2023: the challenges and threats we faced in 2022 will certainly pave the tortuous path for more uncertainties in 2023 and in the coming years. The changing climate, geopolitical uncertainty and the digital and technological disruptions will all play major roles. We may reflect and take a step back to look at the bigger picture or the three-dimensional image, and then zoom in on the many voxels of opportunities that allow us

to envision an image that connects us to build our resilient future. Our future begins here and now.

Until next time!

REFERENCES

- Adams KT, Osmani M, Thorpe T and Thornback J (2017) Circular economy in construction: current awareness, challenges and enablers. *Proceedings of the Institution of Civil Engineers – Waste and Resource Management* **170**(1): 15–24, <https://doi.org/10.1680/jwarm.16.00011>.
- Gebreyesus GD, Tegegne BD and Ali AS (2023) Healthcare waste management protocols challenged by Covid-19: a case study. *Proceedings of the Institution of Civil Engineers – Waste and Resource Management* **176**(1): 3–15, <https://doi.org/10.1680/jwarm.21.00035>.
- Khabaz Meherjardi M, Khabiri MM and Khani Sanij H (2023) Influence of cigarette filter quantity on asphalt mixture: thermal and ageing performance. *Proceedings of the Institution of Civil Engineers – Waste and Resource Management* **176**(1): 16–27, <https://doi.org/10.1680/jwarm.21.00022>.
- UN (United Nations) (2023) *Global Waste Initiative 50 by 2050: For Africa Towards a Global Impact*. See <https://cop27.eg/#/presidency/initiative/globalwaste> (accessed 09/01/2023).
- Wilson DC, Velis CA and Rodic L (2013) Integrated sustainable waste management in developing countries. *Proceedings of the Institution of Civil Engineers – Waste and Resource Management* **166**(2): 52–68, <https://doi.org/10.1680/warm.12.00005>.