NIAdapts
Planning Toolkit

Service Area Factsheet

Waste Management

How will waste management be impacted by climate change?

Our climate is changing. We each need to understand our role in addressing this challenge and work together to increase the resilience of our organisations and society. Cutting carbon emissions is vital as we must reduce the severity of climate change. However, it is equally important to begin preparing for the increase in extreme weather which we are already experiencing, and which is projected to increase substantially in intensity and frequency in the coming decades. We call this act of preparation 'Climate Adaptation.'

Local councils will play a pivotal role in the implementation of any measures, and so require a collaborative approach from different service areas in order to address the impacts of climate change. Every service has something to offer to increase resilience for the council and communities it represents, from overall strategies to daily decisions and management.

This brief is not designed to provide a comprehensive overview, but rather to initiate discussion on the role of waste management in addressing climate change impacts as part of a wider suite of documents for other services.

What are the climate risks posed to waste management?

The World Economic Forum 2019 Global Risks Report, stated that the 'spending on disaster recovery is almost nine times higher than on prevention'[1]. Disruption to daily operations like waste management and recycling are the first to be noticed by residents and are projected to be affected much more frequently as climate change progresses. Expected climate change impacts to Waste Management include:

- Health and safety issues for staff (indoor and outdoor) as a result of changing environments.
- Disruption to waste collection, difficulties reaching waste disposal and treatment sites.
- Increased decomposition rate of materials, increasing impacts on local neighbourhoods from odour. This may require more frequent collections.
- Flood events, causing freshwater to mix with waste and sewerage, the outputs will need to be treated as hazardous waste.

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- Degradation of infrastructure (such as landfills) requiring additional expenditure and resources for maintenance.
- Increasing costs and expenditure to provide additional waste services after an extreme weather event.

What actions could you take?

Waste management and recycling services will have to take action to reduce the risks faced by climate change. You could take action by getting involved with your council's adaptation planning process, which should outline short to long-term impacts, implications and recommended actions for waste services including:

- Adjustment of collection times to avoid the hottest time of the day in summer
- Emergency recovery plans to include all weather events
- Identifying climate resilient solutions to upgrading existing infrastructure (vehicles, water use, waste treatment)
- Community engagement around waste minimisation and recycling practices
- Improve coordination of emergency response with waste and recycling service providers.

Additional Resources

Increasing the climate resilience of waste infrastructure. AEA group, published by Defra. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/183933/climate-resilience-full.pdf

References

[1]World Economic Forum (2019) 'Global Risks Report' Available online: https://www.weforum.org/reports/the-global-risks-report-2019 Accessed January 2020.