

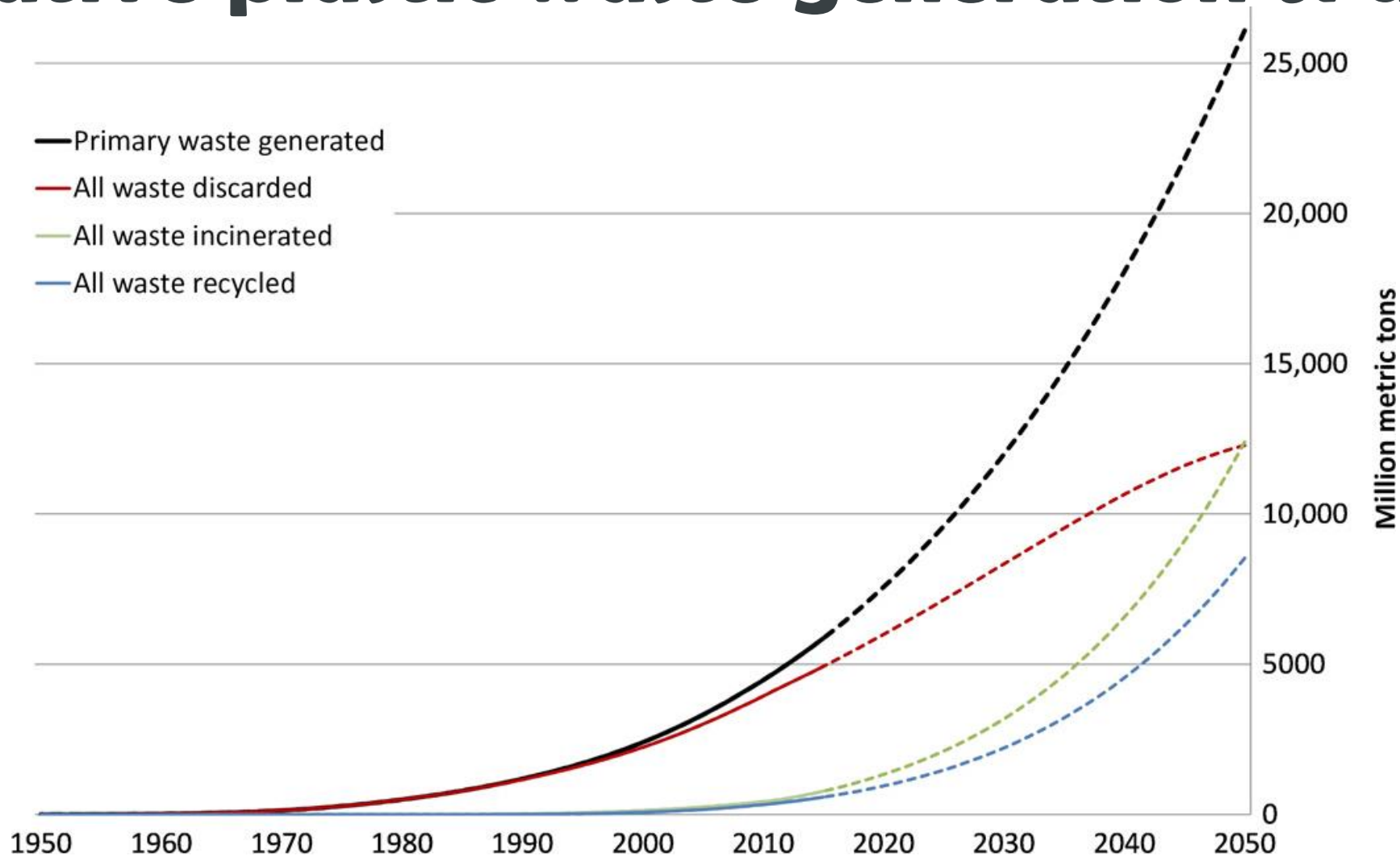
How do we manage plastics pollution?

Clare Collins

Postgraduate Researcher



Cumulative plastic waste generation & disposal



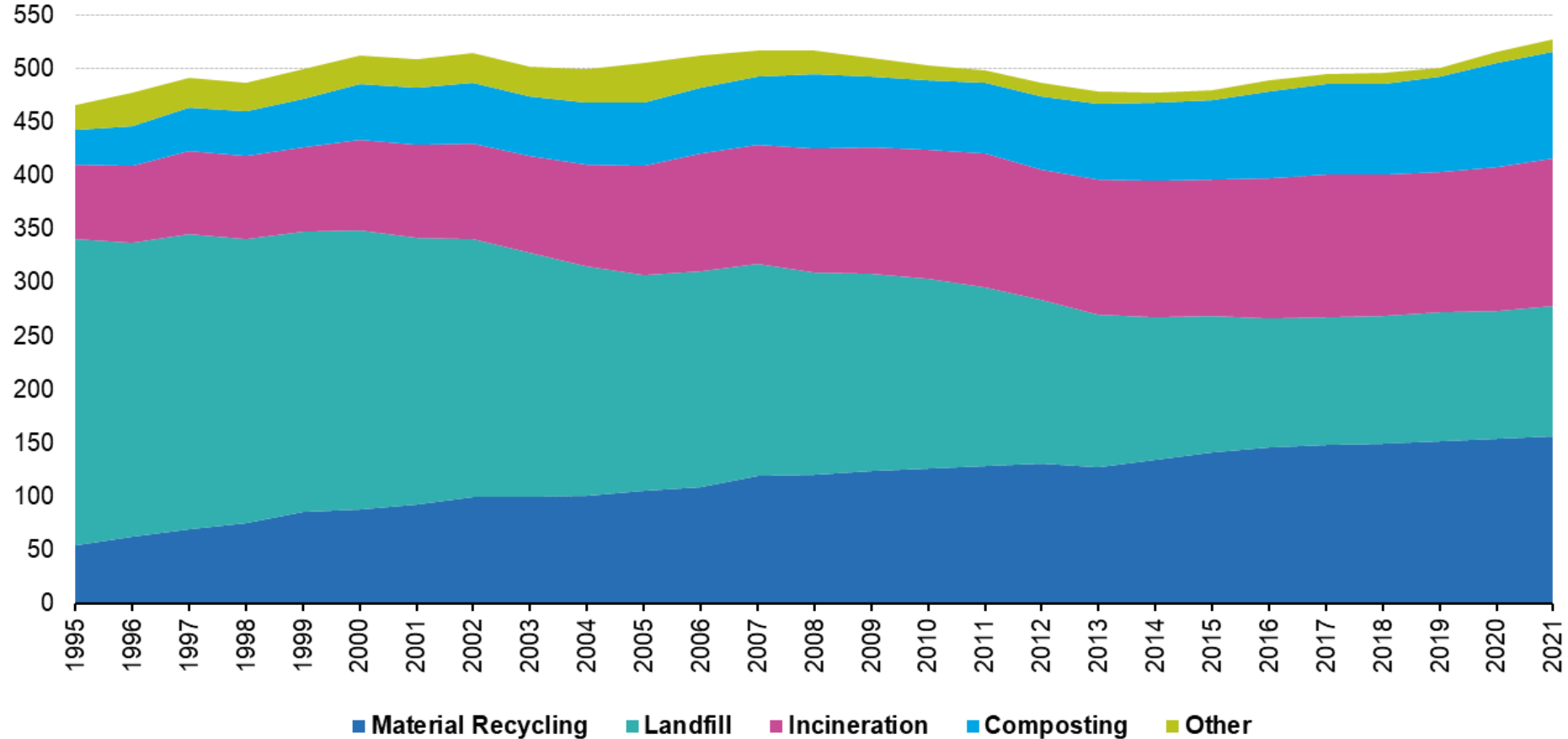
Geyer, Jambeck & Law (2017) 'Production, use, and fate of all plastics ever made.' *Science Advances* DOI: [10.1126/sciadv.1700782](https://doi.org/10.1126/sciadv.1700782)

EU Waste Statistics

4.8 tonnes of waste were generated per EU inhabitant in 2020.
39.2 % of waste were recycled and 32.2 % landfilled in the EU in 2020.

Municipal waste treatment, EU, 1995-2021

(kg per capita) Data from: <https://ec.europa.eu/eurostat/web/waste/publications>



Note: estimated by Eurostat.

Source: Eurostat (online data code: env_wasmun)

eurostat 

Core Principles for the Recyclability of Plastics



Use same material

Use mono-materials or mixed materials of the same type wherever possible. If different materials have to be used they should be different densities.



Minimise colour

Non-pigmented plastic is preferred. If colour is necessary, avoid strong colours as much as possible.



Easily separable closures

These should be easy to detach, should leave no attachments once removed and ideally be recyclable themselves.



Avoid full sleeves

If a sleeve must be used, it should be easily removable and there should be clear instructions explaining how to detach it



Small, easily removable labels

Adhesives should be used sparingly and labels should cover no more than 60% of the product's surface area, as well as being easy to remove.

<https://www.bpf.co.uk/design/recyclability-by-design.aspx>

Provide suitable bins



Encourage community action

- Pick up litter as they walk by
- Organised litter picks
- Taking rubbish home
- Behaviour change: reduce, repair, reuse, recycle
- Pride and care for a beautiful environment
- Clean land, clean water



Collect community litter pick data

#OpenLitterMap

Why should we collect data?



1. Visibility

For many people, litter has become normal and invisible. Maps are powerful because they communicate what we cannot usually see.



2. Problem solving

Our data is open and accessible. Everyone has equal, open and unlimited rights to download all of our data and use it for any purpose.



3. Community

We need your help to create a paradigm shift in how we understand and respond to pollution.

Encourage Behaviour Change

Locally

<p>1</p>  <p>Own your bags</p> <p>Swap your single-use plastic bag for a reusable cotton bag</p>	<p>2</p>  <p>Have some bottle</p> <p>Take your own bottle for water & refill on the go</p>	<p>3</p>  <p>Clutching straws</p> <p>Do you need one? If so, seek reusable options</p>	<p>4</p>  <p>Carry a spork!</p> <p>Say no to single-use cutlery, carry your own alternatives</p>	<p>5</p>  <p>Caffeine fix...</p> <p>Carry your own cup for hot drinks, no guilt energy</p>	<p>6</p>  <p>Eco-protect</p> <p>Use washable masks to protect others & the planet</p>	<p>7</p>  <p>Wipe wisely</p> <p>'No' to disposable wipes, carry wet flannel bags</p>	<p>8</p>  <p>Clean teeth & planet</p> <p>Purchase bamboo brushes & toothpaste tablets</p>
<p>9</p>  <p>Loose leaf tea caddy</p> <p>Use plastic-free tea bags or better still, a reusable caddy</p>	<p>10</p>  <p>"No packages" lunch</p> <p>Replace snack packs with filled reusable pots</p>	<p>11</p>  <p>Buy bulk</p> <p>Buy large & decant into small reusable containers</p>	<p>12</p>  <p>Sanitary swaps</p> <p>Change to reusable nappies, period & incontinence pads</p>	<p>13</p>  <p>Reduce & Reuse</p> <p>Reuse wipes/hankies; reduce plastic-wrapped tissues</p>	<p>14</p>  <p>Guilt-free takeout</p> <p>Ask takeaways & shops to fill your reusable containers</p>	<p>15</p>  <p>Cut the cling film</p> <p>Silicon covers, reusable pouches & beeswax wraps</p>	<p>16</p>  <p>Love a library</p> <p>Share stuff amongst family, friends & neighbours</p>
<p>17</p>  <p>Chewing plastic!</p> <p>Give up the gum or swap for a plastic-free version</p>	<p>18</p>  <p>Glitter-less</p> <p>Ready-made microplastics; use a different decoration!</p>	<p>19</p>  <p>Moo-ve on</p> <p>Refill reusable glass bottles for milk & juices</p>	<p>20</p>  <p>Height of fashion</p> <p>Bargain hunt second hand clothing & repair favourites</p>	<p>21</p>  <p>Naked bars</p> <p>Packaging free soap bars for hands, hair, body, shaving...</p>	<p>22</p>  <p>Bin the butt</p> <p>Cigarettes contain plastic - QR gives NHS advice to stop</p>	<p>23</p>  <p>Love a loofah</p> <p>Swap the plastic dish cloths for a vegetable that cleans!</p>	<p>24</p>  <p>Green gardening</p> <p>Substitute plastics outside - plastics become brittle</p>
<p>25</p>  <p>Involve the kids</p> <p>Don't be lured by free gifts with meals & magazines</p>	<p>26</p>  <p>Burst the balloon</p> <p>Why not create reusable bunting instead?</p>	<p>27</p>  <p>Craft work!</p> <p>Switch from plastic adhesive tape to paper-based tape</p>	<p>28</p>  <p>Hanging around</p> <p>Buy wood or metal clothes pegs next time you need any</p>	<p>29</p>  <p>Writing refill</p> <p>Replace disposable biros for refillable ink cartridge pens</p>	<p>30</p>  <p>Shop smarter</p> <p>Weigh up size & packaging to choose the best options</p>	<p>31</p>  <p>Sweet treats</p> <p>Make your own at home like yummy granola bars</p>	<p>Ideas by @PlasticsEnvRes researchers</p> <p>Design by @ClareyCollins</p> <p>Plastics in the Environment Research Cluster EEI - University of Hull</p>

Lobby government & industry

- Water companies sewage
- Farming practices
- Boat company product research
- Boat users to check and repair where damaged plastics
- Government to increase producer responsibility payments as virgin plastics still much cheaper than recycled





Be a good ancestor

Make responsible living second nature

Clare Collins

 @ClareyCollins

C.Collins-2019@hull.ac.uk

Thank you for
listening

