The United States is the world's largest carpet manufacturer with production expected to reach 14.6 billion square feet this year. That’s enough carpet to cover over 250,000 football fields. With roughly 4 billion pounds of carpet entering the U.S. waste stream every year, less than 1% of carpet is recycled into new carpet, while a majority of the remaining 3.96 billion pounds is either landfilled or incinerated.¹

The New York State Department of Environmental Conservation (DEC) has estimated that New Yorkers generated more than 37 million tons of waste in 2014.² As landfills begin to reach capacity, local governments are now facing higher costs associated with processing waste. In 2017, local governments outside of New York City spent a total of $917 million on garbage-related activities.³ In 2008, carpet accounted for 1.4% of solid waste generation in New York.

**Toxic chemicals found in carpet**

A new report by the Changing Markets Foundation, provides a comprehensive analysis of the toxicity of US carpets. The report provides information from 12 carpets samples from the nation’s six largest carpet manufacturers. The sampling screened for toxic chemicals such as nonylphenol, PFAS, and phthalates, which can enter our environment through industrial processing and municipal waste. All carpet samples were found to have at least one toxic chemical present and many samples contained two or more.

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Health Concern</th>
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<tbody>
<tr>
<td>PFAS (Per- and polyfluoroalkyl Substances)</td>
<td>PFAS accumulate in the body. Increased exposure through ingestion, inhalation, and direct skin contact, is linked to developmental and reproductive disorders, and even cancer.</td>
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<tr>
<td>Phthalates</td>
<td>Exposure is linked to endocrine disruption, reproductive disorders and cancer.</td>
</tr>
<tr>
<td>Nonylphenol</td>
<td>Exposure is linked to endocrine disruption, and developmental and reproductive disorders.</td>
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</tbody>
</table>

These chemicals present a range of serious health risks from endocrine disruption, reproductive disorders, and even cancer. Infants and young children, who are sensitive receptors to toxic chemicals in the first place, are especially vulnerable to the exposure of chemicals in carpet as they spend more time on the ground. Children tend to experience higher uptakes of chemicals (on a body weight basis) due to hand-to-mouth transfer.
Issues with Recycling Toxic Carpet

Due to current toxicity, carpet can only be recycled into materials of lesser value, such as carpet backing, decking or insulation. Recycling toxic carpet only perpetuates the problem by transferring these chemicals into new carpet for years to come. The goal is to have manufacturers phase out these chemicals and as carpet becomes less toxic, manufacturers must take old carpet and recycle it into new carpet, thereby preserving the integrity of carpet rather than creating a new and unnecessary product. New York can help address these issues by implementing an Extended Producer Responsibility (EPR) program for carpet, which will increase recyclability and drive the reduction of toxic chemicals.

Extended Producer Responsibility (EPR)

EPR is the concept where manufacturers are responsible for the entire life-cycle of the products that they put into the marketplace, including the financial responsibility for post-consumer disposal and/or recycling. This concept challenges the current status quo of make, use, and dispose by advocating for a ‘circular economy’ which aims to keep resources at their highest utility and value at all times. Because carpet can be both toxic and difficult to recycle in its current state, establishing an EPR program for carpeting in New York has the potential to yield tremendous environmental and health benefits.

A successful EPR program would help:

1. lower human exposure to toxic chemicals
2. create local jobs to aid in carpet collection and recycling
3. decrease our reliance on fossil fuels for carpet manufacturing and disposal

In New York, no regulatory framework exists that would require or incentivizes carpet manufacturers to improve the quality of their product. A component of a comprehensive EPR program would require manufacturers to pay a fee when disposing of post-consumer carpet. Specifically, manufacturers would pay higher fees for carpet that is landfilled or incinerated, as compared to the fees when post-consumer carpet is recycled. Since manufacturers cannot recycle toxic carpet, producers are incentivized to create cleaner carpets to avoid higher fees.

So far, California is the only state who has adopted an EPR program for carpets. Their program is designed to ensure that carpets are diverted from the landfill, but over recent years the program has experienced challenges. In particular, their heavy reliance on incineration for carpet disposal. As a petroleum based product, burning or landfilling carpets is an unsustainable practice since petroleum is a nonrenewable source. Successful EPR legislation would focus on reusing and recycling carpet rather than landfill or incineration.