

# Tackling Furniture Industry Waste

School of Human Ecology ▪ Brianna Felts & Erin Simmons

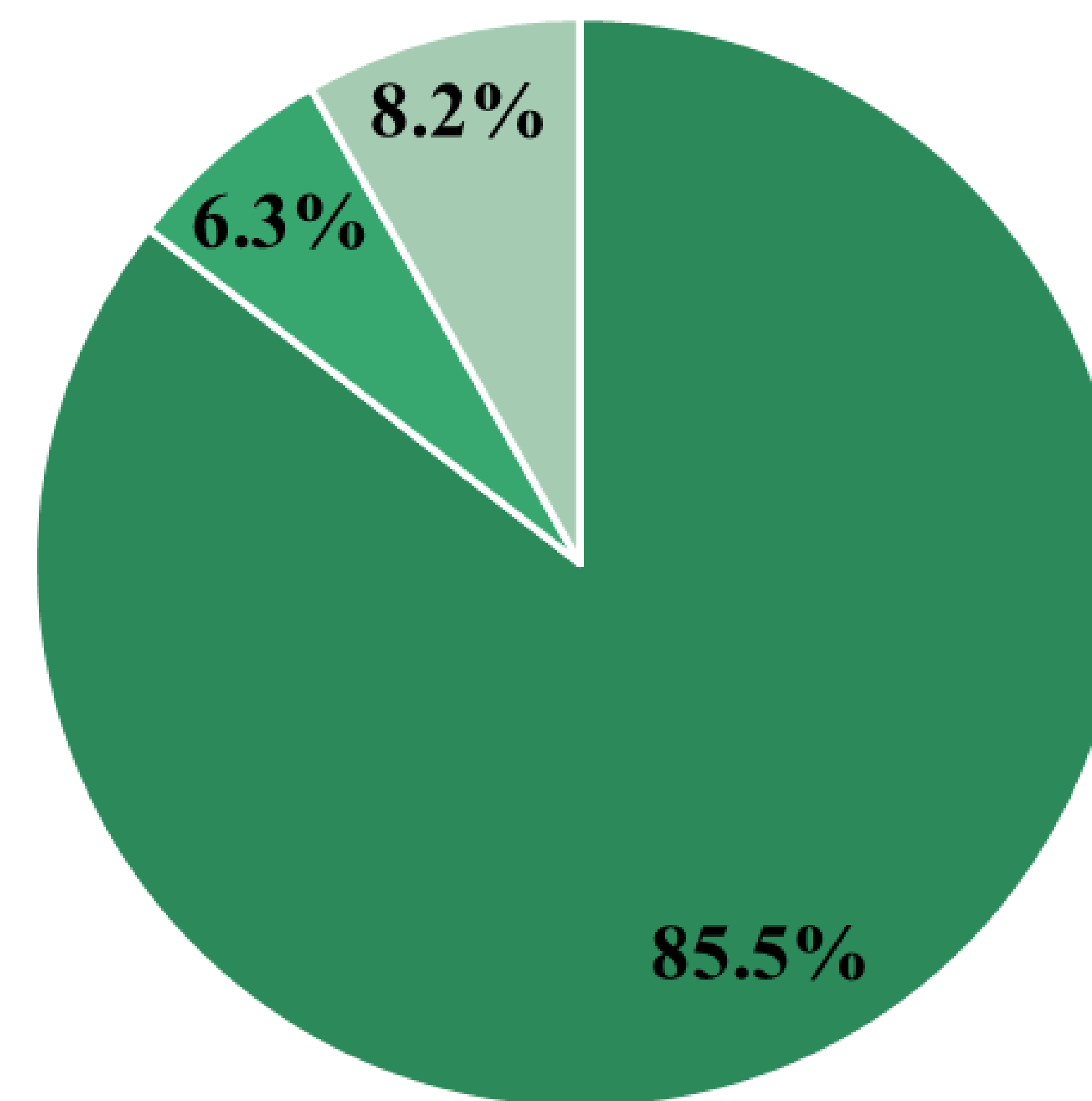
## Introduction

Furniture industry products are among the least recycled items. According to the Environmental Protection Agency (EPA), it is estimated 9.8 million tons of furnishings and appliances are dumped in landfills each year. This is equivalent to **19.6 trillion pounds of furniture and appliance waste**, which is equivalent to filling up 25 Empire State Buildings (Stone, 2020). Since 9.8 million tons of furnishings and appliances is alarming, we decided to conduct a study on how the United States can help the environment while reducing the number of furnishings and appliances in landfills. Based on the amount of furnishings in landfills in the United States, our research questions are: How is the United States addressing the amount of waste in landfills and does the United States have a plan to reduce furniture from accumulating in landfills?



Courtesy of: Pinn, Myram and Gapper, John, 2019.

## Final Destination of Bulky Items Collected by Re-use Organizations in England & Wales



■ Re-used ■ Recycled ■ Disposed of

Courtesy of: Curran & Williams, 2010.

## Sources

- Curran, A., Williams, I.D. (2010, February 6). The Role of Furniture and Appliance Re-Use Organisations in England and Wales. *Resources, Conservation and Recycling*, Vol. 54(10), 692-703.
- Environmental Protection Agency. (2018). Facts and Figures about Materials, Waste and Recycling. Durable Goods: Product-Specific Data. <https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/durable-goods-product-specific-data>
- Stone, Leilah. (2020, December 18). With a circular economy in mind, retailers are speaking out against "fast furniture." *Metropolis*. Retrieved from <https://www.metropolismag.com/sustainability/rent-restore-reuse-furniture/>
- Gapper, John. (2019, February 5). IKEA furniture does not need to fall apart. *Financial Times*. <https://www.ft.com/content/c75b3256-2940-11e9-a5ab-f18ef2b976c7>
- Furn360. (2018). Circular economy in the furniture industry: Overview of current challenges and competences needs. Erasmus+. <http://www.furn360.eu/wp-content/uploads/2018/10/Circular-economy-in-the-furniture-industry-11092018.pdf>

## Case Study

A. Curran and I.D. Williams conducted a study in the UK collecting data from approximately 400 re-use organizations.

- These organizations are privately owned, independent of government intervention.
- Relies on volunteers in the communities
- The main source of incoming items in all locations was donations from the general public.
- **Where re-use organizations collected bulky waste, re-use rates grew from 2-3% to 40% in 2004/05.**
- The re-use of bulky items through these organizations has been estimated to be **3.2 million items, or 76,000 tons.**
- Across these organizations, on average, **85.5% of items were re-used**, with the remaining either recycled or incinerated.

These findings propose that by establishing a relationship between waste management facilities and re-use organizations, there is a direct and positive effect on furniture industry waste landfilled each year.

## Method

We pursued a case study method, where three major reports were reviewed regarding recycling initiatives on a global scale.

- **Curran and Williams**  
Installation of 400 re-use organizations with primary initiative to collect bulky waste before landfilled
- **Mariano Ramirez**  
Discusses tax breaks for recycled furniture in Australia and Sweden to encourage larger businesses to recycle
- **Furn360**  
Explores the circular design process

Upon review of the three studies, more in-depth research was conducted on Curran and Williams findings based on success.

## Recommendations

Based on this study, we have concluded that the United States has ignored the amount of waste of furnishings and appliances in landfills. We suggest that there needs to be created a way to retrieve recyclable furnishings and appliances. Curran and William's study discovered a way to reduce the amount of furnishings in appliances by introducing to local communities new organizations to retrieve recycling furnishings and appliances. Due to the current rate of the United States' consumption of furnishings and appliances, we recommend that a program needs to be created to reduce waste on a large scale. The United States needs to create multiple organizations that promote and clean landfills of all furnishings and appliances; this could be done through means such as refurbishing or restoring these waste items while also offering tax breaks for those who participate in these programs. We feel this will significantly reduce the overall waste of furnishings and appliances while also extending their overall lifecycle.