

Recycling: an Economic Phenomenon

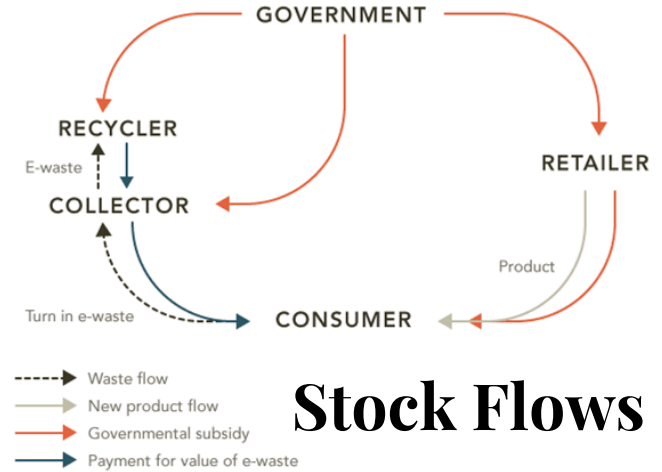
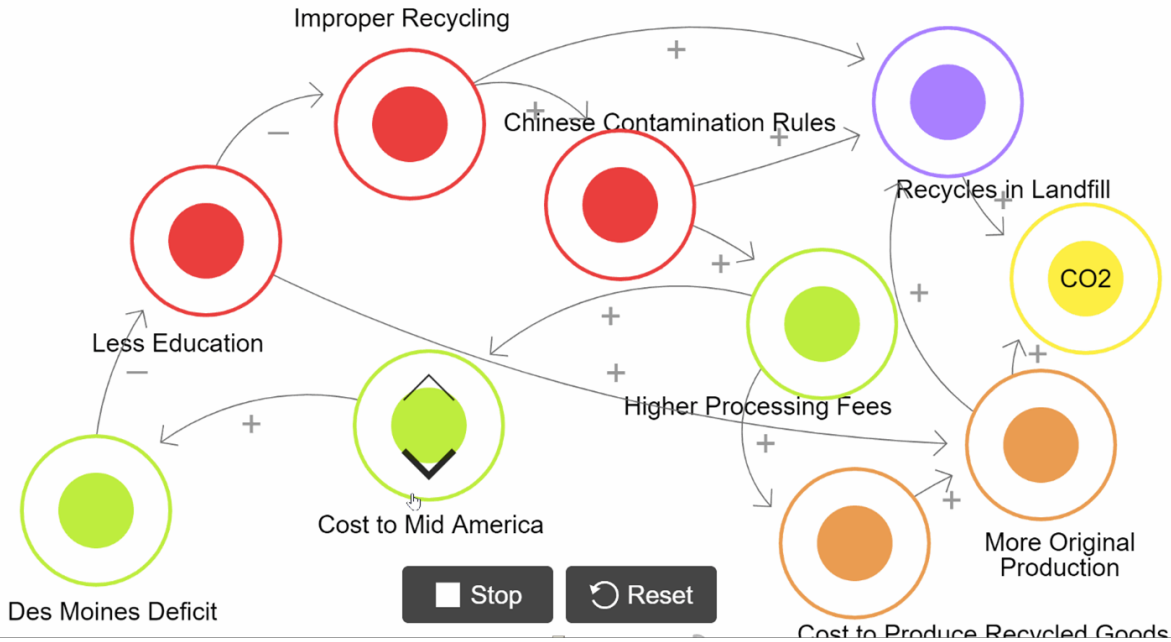


My Recycle Bin Items Go... Where?

- American cities sell recycled items to processing companies (i.e. Mid America)
- In Des Moines alone, **20 tons per day** of recycled paper go to landfill
 - “That’s where the markets have deteriorated to,” -Mid America President
- **Recyclables cannot be processed** unless China agrees to buy them
- Des Moines increasingly loses money every year (\$50,000 +)
 - The city continues to subsidize
 - “It still preserves airspace at the landfill, which is an expensive resource, and we wish to preserve its ability to preserve our garbage needs in the future.” - Mayor
- Fees increased \$18/ton to \$65/ton last year
 - (Between two intermediate actors)
- 60% of bin content has no value
 - Contamination
 - Recycled paper value dropped from **\$100/ton to \$30/ton** - **\$47/ton** processing fee in 6 years



Causational Flows



Stock Flows

<https://bit.ly/2SwdfrT>

Traps & Warm Data

- Public knowledge
 - Improper recycling practices
 - Promotion of recycling over reducing
 - Misinformation causes positive feedback
 - Costly reputation of green programs
 - Negative feedback for initiatives
 - Politics, partisanship, & power
 - Costs reduce education funds
- Tragedy of the Commons
 - Of City funding
 - Of Co2 buildup
 - Enforcement problem
- Policy resistance
 - Advantages can be countered, or even overcompensated, by negative societal reactions



Boundaries & Limitations

- Boundaries & Uses
 - Des Moines: pinpoint institutions & stats
 - Economic motivators
 - Intermediate & international actors
 - Societal tone
 - Carbon emissions
 - Capitalism-driven inefficiency: throwing away usable refined material
- Exclusions & Limitations
 - Non-Midwest
 - Personal familiarity with Midwest warm data
 - Federal policy
 - Still bounded by Chinese decisions
 - Inclusion could apply to lobbyists & national plastic-product policy
 - Societal change