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**Environmental
Law & Policy
Hack**

The Issue: Reduction and safe management of waste constitutes a traditional focus of modern environmental law. In the United States, core federal statutes—most notably, the Resource Conservation and Recovery Act and Comprehensive Environmental Response, Compensation, and Liability Act—impose complex requirements designed to prevent waste from contaminating environmental media and to clean it up when it does. In addition to the long-recognized imperative to reduce and manage waste to avoid soil, air, and water pollution, reduction and management of waste is now recognized as an integral part of reducing greenhouse gas emissions to limit climate change. Nearly a third of Nationally Determined Contributions submitted by parties to the Paris Agreement include [circular economy approaches](#) that would reduce emissions by promoting sustainable use of natural resources through smarter product design, longer use, recycling and more, thereby minimizing waste. The New York State Climate Action Council explained, in the [Final Scoping Plan](#) to achieve the emission reductions required by the Climate Leadership and Community Protection Act, that to meet its climate targets, New York must achieve “significant increased diversion from landfills” by 2030 and “a dramatic shift in the way waste is managed, to the point that landfills and combustors are only used sparingly for specific waste streams” by 2050. And, recognizing that the most significant GHG emissions impact during the life cycle of products and packaging result not from disposal, but production of the products and packaging that eventually become waste, the Final Scoping Plan also emphasizes the need to address the full life cycle of materials and products and spur “a fundamental shift in consumer habits, including purchasing practices.”

The succinctly stated imperatives to “sparingly” use landfills, address the full life cycle of goods, and achieve a “fundamental shift” in consumer habits present an enormous challenge. In 2018, the average American generated [4.9 pounds of household waste per day, up from 2.68 pounds in 1960](#). A 2020 study found that American households throw away [one-third](#) of the food they purchase. Recycling and composting by households increased significantly since 1960, but that increase has been overwhelmed by increases in the overall amount of household waste. The annual volume of household waste that is combusted or sent to landfills continues to rise.

Despite the long-standing attention in environmental law to managing waste, approaches for managing waste are often siloed, focused narrowly on disposal and certain types of waste without adopting a broader, circular economy approach. No federal law governs the volume of waste households may generate, few federal laws speak to the content of that waste, federal

environmental law does not address levels of consumption, and federal law generally does not require manufacturers to address end-of-life management of their products. Daunted by the prospect of attempting to regulate millions of households and of indirectly regulating consumption, federal policymakers exempt household waste—which regularly includes electronics, batteries, chemical cleaning fluids—from the definition of hazardous waste, thereby blessing the routine disposal of hazardous constituents in municipal landfills.

Household waste disposal is subject most directly to regulation by state and municipal governments. Municipalities often charge fees, typically indexed to volume or weight, for waste pick up and disposal. Some municipalities have adopted more extensive controls on household waste disposal. San Francisco, for example, adopted a [Mandatory Recycling and Composting Ordinance](#) that requires households separate their waste into recycling, compostables, and trash. Yet, in much of the United States, extremely high per capita consumption (including of ubiquitous, single-use plastics) and high per capita household waste generation remain the norm, with relatively low rates of diversion from landfills or incineration. This is in part because even where municipal and county level waste diversion programs exist, significant logistical barriers to participation, including infrequent and/or inconvenient drop-off or collection protocols.

Recognition of the need to adopt circular economy approaches and reduce consumption and associated household waste is growing. Concerns about resource depletion, plastic and other pollution, and the greenhouse gas emissions from the extraction, production, transport, and disposal of products underline the urgent need for transformational approaches to radically reduce consumption and household waste volume and toxicity.

The Problem: We challenge you to propose an innovative approach to spur meaningful reduction in the volume of the household waste stream sent to landfills or for incineration (*i.e.*, not diverted to compost or recycling). The challenge is broad and successful proposals could take many forms, including, for example, by focusing on any or some combination of:

- A specific component of the household waste stream (such as food waste or a particular good or product).
- A specific region, state, or local community.
- Upstream changes to the design of products and responsibilities of producers.
- Interventions to guarantee prices and buyers of recycled materials, such as feed-in tariffs.
- Analysis of laws and policies around the ownership of curbside waste and their potential to inhibit alternative pickup systems for things like furniture, textiles, and food scraps.
- Proposals to address tension between bottle redemption laws and curbside recycling, particularly with respect to aluminum cans and PET bottles.
- Interventions to encourage households to produce less waste, including reductions in consumption.

- Elevation and endorsement of existing, but not widely adopted, policies with the potential to succeed on a wider scale.
- Use of advanced technology, including artificial intelligence.
- Learning from diverse approaches to nature, consumption, and waste avoidance around the world, including [Tribes and Indigenous Peoples](#).

A key requirement is that the proposal should address waste generated by households (as opposed to business or industry). Proposals should be grounded in and explain current law, including how the proposed approach will intersect with existing laws and policies. Proposals should also cognize and consider intersections with justice, including how an approach could impact different socioeconomic, racial, ethnic, religious, and/or indigenous groups, and offer solutions to avoid disproportionate impacts.

Submission guidelines:

- Participating teams should propose an innovative and transformational approach to spur meaningful reduction in the volume of the household waste stream sent to landfills or for incineration (*i.e.*, not diverted to compost or recycling).
- Teams should situate the approach within existing law; identify steps and actors necessary to implement the approach; and clearly explain how the approach would change the household waste stream.
- Teams should describe how the Hack award funds could be used to support implementation of the team's proposed approach (for example, by supporting the development of a webinar or website, funding public outreach, etc.).
- The Hack encourages teams to consult and work with (even include as members of their team) groups or individuals drawn from a variety of fields whose contributions support the team's work. Teams are welcome to work with government officials, private businesses, or community groups.