

PLASTIC POLLUTION & PRODUCER RESPONSIBILITY

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WHY IT MATTERS

Plastic pollution is not only a litter problem; it is a fossil fuel, climate, public health, wildlife, agricultural, economic, infrastructure, and environmental justice problem. Nearly 40% of virgin plastic demand comes from packaging, much of it designed for short-term use, and recent reporting shows that the fossil fuel industry is increasingly reliant on plastics as markets for fuels change.^{1,2} Virginia's climate planning also identifies solid waste as a source of greenhouse gases and includes decreasing unnecessary single-use plastics among waste-sector climate strategies.³

Plastic is extremely difficult to recover from waterways. Chesapeake Bay modeling found that estuaries can retain most incoming plastic, and a 2025 analysis of more than 10,000 wildlife necropsies found plastic ingestion in 35% of seabirds, 12% of marine mammals, and 47% of sea turtles studied.^{4,5,6} Plastic pollution also breaks into microplastics that move through air, water, food, and human tissue, while fossil-fuel-derived chemicals used in plastics – including phthalates, bisphenols, PFAS, and flame retardants – raise concerns for endocrine, reproductive, developmental, and cardiovascular health.^{7,8,9,10,11,12,13,14,15,16}

These impacts are not distributed evenly. Environmental justice experts and the United Nations Human Rights Council have recognized that plastic pollution's life cycle, from extraction and production to disposal and ocean pollution, disproportionately burdens vulnerable communities, and threatens the human right to a clean, healthy, and sustainable environment.^{17,18,19}

CURRENT LANDSCAPE

Virginia has taken meaningful but incomplete steps to reduce plastic pollution. State law allows any city or county to adopt a five-cent disposable plastic bag tax for grocery stores, convenience stores, and pharmacies.²⁰ Virginia also has an expanded polystyrene food service container ban that is in full effect as of July 1, 2026.²¹ These policies target common, low-value, hard-to-recycle products, but they do not solve the wider packaging and waste problem.

The Virginia Department of Environmental Quality's (DEQ) draft 2025–2045 Solid Waste Management Plan states that Virginia manages about 22 million tons of solid waste annually, of which about 17 million tons originate in-state. This plan supports circular economy policies to keep products in the market and reduce waste through stronger product stewardship. Including **Extended Producer Responsibility** for packaging and paper, which would require producers to help finance the collection, recycling, and management of the materials they place on the market.²² The plan also notes Virginia's limited local authority as a Dillon Rule state and identifies local material-regulation authority as one method munic-

ipalities could use to increase diversion.

Support for plastic bag reduction also extends outside of environmental organizations: Virginia Farm Bureau supports measures encouraging retailers to use paper or reusable canvas bags to reduce agricultural problems caused by plastic bag litter, such as animal ingestion or crop entanglement.²³

OPPORTUNITIES

Virginia can reduce its plastic pollution by pairing statewide producer responsibility with **targeted source-reduction authority**. A packaging and paper products Extended Producer Responsibility program requires producers to help finance and improve collection, recycling, reuse, and waste-prevention systems, shifting costs away from local governments and toward product design and management.^{24,25}

Beverage deposit programs offer another proven producer responsibility model; 65% of Virginia voters support bottle deposits, and Oregon's deposit system achieved an 88.5% preliminary redemption rate in 2022, meaning 88.5% of beverage containers were recycled and the deposits returned through the program.^{26,27} A recycling deposit and the subsequent redemption upon recycling is a highly effective tool to incentivize consumers to recycle which then increases recycling rates.

The 50 States of Recycling 2.0 report modeled that stronger recycling policies like producer responsibility and a beverage deposit program in Virginia could result in \$1.7 billion in total annual benefits by returning \$210 million of recycled material to the market, avoiding 2.5 million metric tons of carbon dioxide equivalent annually by reducing the need for virgin materials and improved waste management infrastructure, and increasing recycling-related jobs from 3,600 to 11,000.²⁸

Virginia can also reduce pollution before products reach consumers by strengthening controls on pre-production plastic **pellets** and requiring best management practices for discharge, handling, and transport.²⁹

Additionally, as a **Dillon Rule** state, Virginia can authorize a local option for single-use plastic bag bans. Virginia already allows cities and counties to tax disposable plastic bags, but not every community prefers a tax-based approach. A state-authorized local ban option, drafted with exemptions aligned with existing bag-tax law, gives communities another practical source-reduction tool to protect waterways, farms, wildlife, and public infrastructure. This initiative complements—but does not replace—producer responsibility, beverage deposits, pellet controls, recycling modernization, and public education.

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