

**Expanded Policy**

**REDUCING GHG EMISSIONS FROM PLASTICS**

**Policy summary:** Solid waste is generated by residences and businesses across Massachusetts. Diverting high-carbon-content materials, such as plastics, from the waste stream can reduce emissions released after materials are discarded, and for some part of the waste stream, incinerated. These diverted materials can then be recycled into other products. Diverting plastics from the waste stream under this Plan will result in materials with a lower carbon content being combusted at Massachusetts municipal waste-to-energy facilities, reducing emissions of CO<sub>2</sub>. Looking only at in-state emissions reductions, MassDEP conservatively estimates the reduction potential from diverting a portion of plastics from solid waste disposal in 2020 at 0.3 million metric tons of CO<sub>2</sub>e per year.

Economy-wide GHG emissions reduced 2020	0.30 million metric tons CO <sub>2</sub> e; 0.3%
Annual \$ savings statewide in 2020	\$8 to \$11 million
Cumulative \$ savings statewide 2009-2020 <sup>74</sup>	\$69 to \$92 million

**Clean energy economy impacts:** Recycling yields greater local employment than does waste combustion. Currently, industries associated with recycling support 14,000 jobs in Massachusetts, and increased recycling of plastics would spur growth.

**Rationale:** The Commonwealth periodically prepares a *Solid Waste Master Plan* in accordance with Massachusetts General Law Chapter 16 Section 21. The solid waste sector includes sources of GHG emissions, such as landfills and municipal waste combustors, and plastics constitute a significant portion of the emissions. As detailed in a press release<sup>75</sup> that accompanied release of the most recent *Draft Solid Waste Master Plan*, "...The main objectives of the draft master plan include maximizing recycling, improving the environmental performance of solid waste facilities and developing integrated solid waste management systems. The draft master plan calls for a dramatic increase in residential, business and institutional recycling and composting, with an emphasis on paper and organics recycling...".

**GHG impact:** 0.3 million metric ton reduction in CO<sub>2</sub>e in 2020.

**Costs:** According to the *Draft Solid Waste Master Plan*: "Diverting material from disposal, whether through upfront waste reduction, reuse, recycling or composting, can save significant disposal costs. Current disposal fees in Massachusetts typically range from \$60 to \$80 per ton. If we are able to achieve our goal of reducing disposal by 2 million tons per year by 2020, that would result in annual avoided disposal costs of \$120-\$160 million. Plastics diversion alone constitutes some \$8 million to \$11 million of the total \$120 million to \$160 million in annual avoided disposal costs.

**Implementation issues:** Public hearings have been held on the Commonwealth's *Draft 2010-2020 Solid Waste Master Plan: A Pathway to Zero Waste*.<sup>76</sup> All public comments have been received and are being reviewed.

<sup>74</sup> Based only on reduced disposal costs.

<sup>75</sup> <http://www.mass.gov/dep/public/press/0710swmp.htm>

<sup>76</sup> <http://www.mass.gov/dep/recycle/priorities/dswmpu01.htm#swmp>