

FOOD WASTE INITIATIVE
RESEARCH BRIEF SERIES



**Social Science Literature Review on Value
of Measuring and Reporting Food Waste**

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ELI's Food Waste Initiative conducts research and works with stakeholders to prevent food waste, increase surplus food donation, and recycle the remaining food scraps. The Initiative aims to help stakeholders meet the U.S. food loss and waste goals by designing and implementing public policies and public-private initiatives to prevent food waste, increase donations of surplus food, and expand food scrap recycling. To learn more about the Initiative's work, visit: <https://www.eli.org/food-waste-initiative/food-waste-prevention-recovery-and-recycling>.

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A review of relevant social science literature indicates that simply measuring waste or emissions can motivate behavior change, due to increased awareness as well as reputational and financial concerns of measuring entities.

The old adage “what gets measured gets managed,” often cited in the context of food waste to indicate the first step in reducing waste is to track it (Robertson, 2019), is supported by social science research. Studies have shown that measuring food waste motivates individuals to reduce waste at the household level (Nye & Burgess, 2008; Sharp, et al., 2010; Leverenz, et al., 2019; Young, et al. 2017). Measuring techniques such as self-weighing, even when implemented alone without waste reduction interventions, can put people “in touch” with their waste and provide a reminder of the need for reduction (Zorpas & Lasaridi, 2013).

On a psychological level, increased awareness from measuring food waste may activate "loss aversion" and motivate behavior accordingly (Johnston, 2013; Denniss & Baker, 2011). Food waste reduction pilots sponsored by the U.S. Environmental Protection Agency found that household measurement of food waste strongly motivated people to implement waste reduction strategies (Sonntag, 2016). The impact of measurement on behavior has also been documented in other areas of sustainability, including reducing energy consumption (Sussman & Chikumb, 2016).

Although the impact of food waste measurement on a corporate level has yet to be sufficiently studied, other forms of environmental measurement, such as carbon labelling, have shown potential to shift corporate behavior (Vandenbergh, et al., 2011; Taufique, et al., 2022). Private firm response to environmental performance measurement and reporting is documented even when consumer effects are modest due, in part, to concerns about reputational loss and potential penalties (Kitzmueller & Shimshack, 2012; Bullock, 2017; Darnall & Aragón-Correa, 2014; Hoffman & Ventresca, 2002; Di Giuli, 2013; Cohen & Konar, 2000). For example, the implementation of the Toxics Release Inventory (TRI) program, which was enacted as part of the Emergency Planning and Community Right to Know Act, demonstrates the power of measurement. The TRI’s public disclosure component motivated companies to significantly reduce pollution without legal mandates, likely by raising awareness about pollution and activating reputational concerns, stemming from environmental and community group pressure (Hearne, 1996; Konar & Cohen, 1997). The TRI’s success led to the adoption of other similar information disclosure laws and policies, subsequent studies on which have demonstrated varying levels of success (Cohen & Viscusi, 2012). Information disclosure, characterized by some as the third wave of environmental regulation (Tietenberg, 1998), in the form of a requirement to measure food waste, may have similarly positive effects in driving more sustainable behavior.

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