

"We engaged VCMI to identify the full financial cost of food waste on our produce business and to develop action plans to help us reduce shrink and thereby increase our profitability and competitiveness."

(Senior Vice President, North American Retailer)

Pioneer and leader in IDENTIFYING AND REDUCING FOOD WASTE along the value chain

Value Chain Management International (VCMI) is a leading public and industry voice in bringing awareness to the opportunities and solutions surrounding food waste reduction, traceability and the environment. The company has coauthored several publications on food waste, samples of which are summarized below (with digital links to each report).

The company has worked extensively in the international field of food waste reduction and traceability. VCMI applies specialized value chain diagnostic tools to detect where waste occurs and to determine how to eliminate it. VCMI then participates in the implementation of new practices to solve the issues and ensure successful outcomes.

VCMI's Food Waste Publications

Food Waste: Aligning Government and Industry within Value Chain Solutions (October 2016)

VCMI's 2016 report (<u>link</u>) describes how government policies and regulations can exacerbate the unnecessary food loss and waste (FLW) that occurs along the value chain, due in part to the fact that their design and method of implementation does not reflect 21st century realities. The negative impact of government policies and regulations on the creation of FLW can be particularly acute in federated nations.

To sustainably reduce FLW, policies and regulations need to reflect value chain thinking. Policies, regulations and programs also need to be developed in partnership with industry. The UK and the Netherlands are examples of countries whose governments have introduced mechanisms to partner with industry to develop sustainable whole of chain solutions. The report recommends a process that governments and industry can adopt to address the negative economic and environmental impacts of FLW more effectively than is currently the case.

Cut Waste, GROW PROFIT™ — \$27B Revisited (December 2014)

VCMI's 2014 report (<u>link</u>) on food and associated waste shone a new perspective on the topic of food waste. Using insights gained since VCMI's initial research into food waste in Canada, the report estimated that the annual cost of identifiable food waste in Canada is \$31 billion. Based on FAO research, the cumulative costs from an environmental economic perspective would exceed \$100 billion. The report also showed why tackling food waste presents a financial opportunity to businesses operating in today's complex food industry. For example, through reducing food waste, businesses can reduce operating costs by 15 to 20 percent and increase profitability by the equivalent of 5 to 11 percent.

Cut Waste, GROW PROFIT™ — Food and Associated Wastes (May 2013)

VCMI's 2013 report (<u>link</u>) expanded on how businesses can benefit financially from reducing food and associated waste, and provided a framework that businesses can use to identify and capture opportunities. Examples given of the scale of opportunities to improve performance included how improving the feed conversion of Canadian beef cattle could save the equivalent of one million tonnes of grain annually. The same factors that increase farmers' production costs also impact downstream business, such as processors, from forcing them to manage variations in carcass composition.

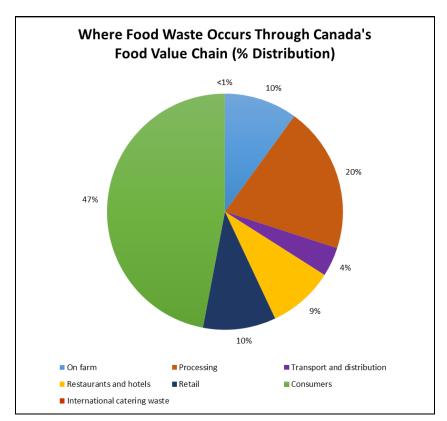
VCMI Food Waste Publications, Continued

Cut Waste, GROW PROFIT™ (October 2012)

VCMI's 2012 report (link) marked the launch of the "Cut Waste, GROW PROFIT™" initiative. This report brought the environmental impacts of food waste to the fore. Researchers have estimated that the average US farm uses three kcal of fossil fuel energy to produce one kcal of food, and that wasted food accounts for an estimated 300 million barrels of oil per year. One thousand two hundred and thirty-two gallons of water are used to produce one 8 oz. steak. Add to this the fertilizer, medications, land and chemicals used in the production of food that is wasted. The report also presented concrete examples of how businesses have benefited financially (including to the tune of millions of dollars) from reducing food waste, and how consumers can markedly reduce the money that they spend on food.

Food Waste in Canada (November 2010)

VCMI's 2010 report (link) estimated the cost of food waste on the Canadian economy to be \$27 billion. This was greater than the value of all Canada's agricultural and agri-food imports in 2007. It was also greater than the combined gross domestic product (GDP) of the world's 32 poorest countries for 2009. The report also described why food miles and plastic packaging are not necessarily the demons that they are purported to be from an environmental perspective. Local food can produce higher levels of waste and negatively impact the environment more than food produced in large scale operations. Plastic packaging plays an important role in reducing food waste, by extending shelf life and maintaining quality beyond what is otherwise possible. The downside of packaging is often not the material itself; rather, it is the lack of coordination that exists in industry and between municipalities on how to manage packaging and distribution from a life-cycle perspective.



Source: VCMI (2010)