

Packaging to Product Ratios: The Need for Amended Consumer Packaging Regulations in the Age of Ultimate Consumerism and Globalization

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Abstract: Federal and provincial governments have developed legislation governing the management, disposal, and recycling of various forms of waste, and, for the most part, the regimes created by this legislation have contributed to a reduced national environmental footprint. Yet, Canada remains one of the highest producers of waste among industrialized nations. While regulations respecting the packaging of various products in specific types of containers as well as regulations related to the disposal of that packaging exist, there is currently no federal or provincial legislation respecting limitations on the quantity or size of packaging relative to a consumer product's particular quantity or size. In our view, any legislative attempt to reduce the waste produced by Canadians that does not restrict or limit the production and use of packaging commensurate to the product it holds is missing a valuable opportunity to achieve the goals of a cleaner environment and a smaller environmental footprint for all of Canada. We argue that the inclusion of statutory provisions restricting permissible packaging to the minimum of what is required to serve the packaging's functions would strengthen Canada's environmental legislation, reduce strain on our waste-disposal systems, and lessen our national environmental footprint. Thus, this article identifies and canvasses the problem of excessive packaging and proposes provisions that underlie a normative statutory framework regime in Canada.

Résumé: Les gouvernements fédéral et provinciaux ont élaboré des lois régissant la gestion, l'élimination et le recyclage de diverses formes de déchets et, pour la plupart, les régimes créés par ces lois ont contribué à réduire l'empreinte environnementale nationale. Pourtant, le Canada demeure l'un des plus grands producteurs de déchets parmi les nations industrialisées. Bien qu'il existe des règlements concernant l'emballage de divers produits dans des types de contenants spécifiques ainsi que des règlements relatifs à l'élimination de ces emballages, il n'y a actuellement aucune législation fédérale ou provinciale concernant les limitations de la quantité ou de la taille des emballages par rapport à la quantité ou à la taille particulière d'un produit de consommation. À notre avis, toute initiative législative visant à réduire les déchets produits par les Canadiens qui ne restreint pas ou ne limite pas la production et l'utilisation des emballages en fonction du produit qu'ils contiennent rate une occasion précieuse d'atteindre les objectifs d'un environnement plus propre et de réduire l'empreinte écologique de l'ensemble du Canada. Nous soutenons que l'inclusion de dispositions législatives limitant les emballages autorisés au minimum nécessaire pour remplir les fonctions de l'emballage renforcerait la législation environnementale du Canada, réduirait la pression sur nos systèmes d'élimination des déchets et diminuerait notre empreinte environnementale nationale. Ainsi, cet article identifie et examine le problème des emballages excessifs et propose des dispositions qui sous-tendent un cadre/régime législatif normatif au Canada.

Titre en français : Le rapport entre l'emballage et le produit : la nécessité de modifier la réglementation de la consommation en matière d'emballage à l'ère du consumérisme ultime et de la mondialisation

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1. INTRODUCTION

In the twenty-first century, Canada is faced—and will, like other nations of the world, continue to be faced—with many significant environmental challenges, ranging from sustainable natural resource development, to managing fresh water resources, to mitigating climate change effects on wildlife habitat, to preventing global pandemics.¹ These challenges include the amount of waste that the country produces on an annual basis—including waste not only from packaged products, but also from toxic chemicals, electronic devices, industrial and human waste.² Both the federal and provincial governments have developed legislation governing the management, disposal, and recycling of such forms of waste, and for the most part the regimes created by this legislation have contributed to a reduced national environmental footprint.³ Yet, Canada remains one of the highest producers of waste among industrialized nations.⁴ For example, according to Statistics Canada, a total of 24,940,747 tonnes of waste was produced nationwide in 2016.⁵ Thus, while the various successes of these regimes may be lauded in some respects, more can and should be done to continually reduce that footprint, not just by federal and provincial governments, but by corporations and even

¹ See Lisa Quinn & A John Sinclair, “Policy Challenges to Implementing Extended Producer Responsibility for Packaging” (2008) 49:1 *Can Public Administration* 60. See also Arjen Y Hoekstra & Thomas O Wiedmann, “Humanity’s unsustainable environmental footprint” (2014) 344:6188 *Science* 1114.

² See Daniel Hoornweg et al., “Environment: Waste production must peak this century” (October 2013), online: *Nature* <www.nature.com/news/environment-waste-production-must-peak-this-century-1.14032>.

³ See Canadian Council of Ministers of the Environment, *Canada-wide Action Plan for Extended Producer Responsibility* (Action Plan), PN 1499 (Canada, 2009) [Extended Producer Responsibility PN 1499].

⁴ See Sophia Harris, “Canadians piling up more garbage than ever before as disposables rule”, *CBC News* (30 September 2015), online: <cbc.ca/news/business/canadians-piling-up-more-garbage-than-ever-before-as-disposables-rule-1.3248949>. Note: this study relied upon Canada’s waste data from 2009.

⁵ See “Disposal of waste, by source: Table: 38-10-0032-01” (last modified 20 April 2020), online: *Statistics Canada* <www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3810003201> [Statistics Canada DoW].

Canadian consumers themselves.⁶

Upon closer inspection of this legislation, while regulations respecting the packaging of various products in specific types of containers as well regulations related to the disposal of that packaging exist, there is currently no federal or provincial legislation respecting limitations on the *quantity* or *size* of packaging relative to a consumer product's particular quantity or size.⁷ At a consumer level, many products are contained in packaging considerably larger than is necessary given the product's actual size; for example, think of a standard bag of potato chips.⁸ While the contents typically amount to 300 grams, the packaging itself is likely able to hold considerably more—perhaps 900 grams, yielding 600 grams of wasted packaging capacity, which ultimately ends up in landfills, if not recycling systems. In the retail grocery market, advertisers and the companies they represent continue to not only laud a product's "new and improved" capabilities,⁹ but also to tactically reduce the *product's* actual quantity or size and to maintain or even increase the size of its packaging to product ratio.¹⁰ In addition to concerns related to consumer protection (as larger package sizes in relation to their contents can be misleading),¹¹ this excess packaging ends up being wasteful.

Both the necessary and the excess packaging is waste as soon as it is produced because it serves no further function once the product it houses is delivered and/or consumed.¹² When packaging is produced and used excessively, it may serve no necessary function at all. In our

⁶ See M Kiygi-Calli, "Corporate Social Responsibility in Packaging: Environmental and Social Issues" in I Altinbasak-Farina & S Burnaz S, eds, *Ethics, Social Responsibility and Sustainability in Marketing, Accounting, Finance, Sustainability, Governance & Fraud: Theory and Application* (Singapore: Springer, 2019). See also Joonas Rokka & Liisa Uusitalo, "Preference for green packaging in consumer product choices – Do consumers care?" (2008) 32:5 Intl J Consumer Studies 516.

⁷ See federally *Consumer Packaging and Labeling Act*, RSC 1985, c C-38, ss 6, 11, 36; *Meat Inspection Act*, RSC 1985, c 25 (1st Supp), s 20; *Food and Drug Regulations*, CRC, c 870, ss B.23.001-B.23.008; *Pest Control Products Regulations*, SOR/2006-124, s 33; in Ontario see *Farm Products Grades and Sales Act*, RSO 1990, c F.8, s 2; *Livestock and Livestock Products Act*, RSO 1990, c L.20, s 16; *Waste Free Ontario Act*, SO 2016, c 12.; in Manitoba see *Packaging and Printed Paper Stewardship Regulation*, Man Reg 195/2008; and in British Columbia see *British Columbia Recycling Regulation of the Environmental Management Act* (BC Reg. 449/2004).

⁸ See Debra Kelly, "The real reason your potato chip bag is half empty" (5 June 2019), online: *Mashed online*: <www.mashed.com/154670/the-real-reason-your-potato-chip-bag-is-half-empty/>.

⁹ See Richard S. Tedlow, *New and Improved: The Story of Mass Marketing in America*, (Cambridge: Harvard Business School Press, 1996).

¹⁰ See e.g. Jun Yao et al, "Cheaper and smaller or more expensive and larger: how consumers respond to unit price increase tactics that simultaneously change product price and package size" (2020) 48 J Academy Marketing Science 1075 at 1075–1077.

¹¹ See Sylvain Charlebois, "Shrinkflation: Why the food packages you buy at the store continue to become smaller", *The Globe and Mail* (23 May 2018), online: <www.theglobeandmail.com/business/commentary/article-shrinkflation-why-the-food-packages-you-buy-at-the-grocery-store/> (note that this article's discussion of shrinking package sizes refers to the size of the food item that the packaging contains, not the packaging itself).

¹² See Anna Marie Mohan, "10 tips for sustainable package design" (5 January 2012), online: *greenerpackage.com* <www.greenerpackage.com/source_reduction/10_tips_sustainable_package_design>. (Packaging's functions include "protecting the product through the supply chain, enticing consumers to purchase, and facilitating consumption" but the advent of online shopping has made the second function arguably obsolete. Therefore, ipro packaging legislation should focus on).

view, any legislative attempt to reduce the waste produced by Canadian corporations (and consumers) that does not restrict or limit the production and use of packaging commensurate to the product it holds is missing a valuable opportunity to achieve the goals of a cleaner environment and a smaller environmental footprint for all of Canada. This missed opportunity is significant because the extant regimes have thus far failed to reach these goals.¹³ We argue that the inclusion of statutory provisions restricting permissible packaging to the minimum of what is required to serve the packaging's functions¹⁴ would strengthen Canada's environmental legislation, reduce strain on our waste-disposal systems, and lessen our national environmental footprint. Thus, this article identifies and canvasses the problem of excessive packaging and proposes provisions that underlie a normative statutory framework/regime in Canada. Part I describes the issues in detail. Parts II and III discuss, respectively, current domestic law and international law, and Part IV proposes regulatory solutions to the issues discussed here.

2. DESCRIPTION OF THE PROBLEM

The earth is vast in terms of both resources and surface area, but also finite.¹⁵ Excessive consumerism generally, and particularly when coupled with unnecessary¹⁶ or excessive packaging,¹⁷ challenges both realities. That is, a consumption-driven mindset and actions taken pursuant to it, especially when informed by the individualism that is a hallmark of Western (and hence Canadian) epistemology,¹⁸ continue to push the earth's limits and threaten the health and prosperity of its current and future inhabitants.¹⁹ Melissa Gorrie, for example, argues

¹³ In 2000, the Canadian Council on Ministers of the Environment (CCME) developed (or attempted to develop) a national protocol on packaging, and prepared a final report: see Canadian Council on Ministers of the Environment, "National Packaging Protocol" (2000), online (pdf): *CCME* <www.ccme.ca/files/Resources/waste/packaging/pn_1511_napp_protocol_june_2000_e.pdf>. One commentator remarked, however, that "...the program failed to reduce post consumer packaging waste." See CM Consulting, "What the National Packaging Protocol Really Reduced (1999)" (16 February 2001), online: *CMC* <www.cmconsultinginc.com/2001/02/what-the-national-packaging-protocol-really-reduced/>.

¹⁴ Those functions include protecting, storing, and identifying goods during transportation, as well as advertising and consumer protection.

¹⁵ See Rob Dietz & Daniel W O'Neill, *Enough Is Enough: Building a Sustainable Economy in a World of Finite Resources* (San Francisco: Berrett-Koehler Publishers Inc, 2013).

¹⁶ See Jennifer Earl, "Whole Foods responds to \$6 pre-peeled orange Twitterstorm", *CBS News* (8 March 2016), online: <cbsnews.com/news/whole-foods-responds-to-6-pre-peeled-orange-twitterstorm/>. (notably, public outcry following Whole Foods' introduction of this product resulted in the retailer nixing it almost immediately).

¹⁷ The internet abounds with examples of ludicrously excessive packaging; see e.g. Loukia Papadopoulos, "17 Completely Nonsense Yet Real Packaging Examples" (29 November 2019), online: *Interesting Engineering* <interestingengineering.com/17-completely-nonsense-yet-real-packaging-examples> (examples pictured include single, unpeeled bananas packaged in plastic wrap and Styrofoam, an umbrella wrapped in yards of paper and shipped in an Amazon box, individually wrapped jelly beans, and a broom shipped in a box large enough to accommodate two adults).

¹⁸ See Zehavit Gross, "How Can We Overcome the Dichotomy that Western Culture has Created Between the Concepts of Independence and Dependence?" (2015) 47:11 *Educational Philosophy & Theory* 1160 ("[w]estern culture excels in positioning individuals at the center... in the Western perception the individual is an autonomous creature that controls nature" at 1160).

¹⁹ See Robert J Brulle & Lindsay E Young, "Advertising, Individual Consumption Levels, and the Natural Environment, 1900–2000" (2007) 77:4 *Sociological Inquiry* 522.

that current levels of personal consumption in North America are unsustainable.²⁰ Another writes more caustically: “Productivist capitalism, molded by a Protestant ethos conducive to work, investment, deferred gratification, and service, has long since given way to consumerist capitalism, defined by an ethos of infantilization conducive to laxity, impetuousness, narcissism, and consumption.”²¹ Some examples of individualism’s effects, consumerism, and excess packaging can be plainly seen in everyday life, and some are difficult, if not impossible, to hide or ignore.²² These effects include massive landfills and dumpsites, the now-famous Great Pacific Garbage Patch (“Garbage Patch”)²³ and thick blankets of smog that cover many major cities in North America, created in part through the production and disposal of packaging and the transportation of consumer goods.

Corporations (and sometimes, people) driven by profit, consumerism, and promoting among the population, a certain individualism expressed through consumption,²⁴ cause landfills to grow and multiply, as excess packaging from household goods continues to be produced and almost immediately discarded.²⁵ By 2016, municipal and regional governments in Canada, for example, owned 500 active engineered landfills, over 400 active dump sites, and approximately 1,200 closed sites.²⁶ One commentator wrote:

And what of the consumer? There is of course endless talk about giving people “what they want,” and how the market “empowers” consumers. The market, indeed, does not tell us what to do; it gives us what we want—once it gets through telling us what it is that we want. It promises liberty and happiness while, in truth, delivering neither. More to the point, consumerism encourages a kind of civic schizophrenia, a disorder that divides the citizen into opposing fragments and denies legitimacy to the part that we understand to be “civic” or “public.” The market treats choice as fundamentally private, a matter not of determining some deliberative “we should” but only of enumerating all the “wants” that we harbor as private consumers and creatures of personal desire. Yet private choices inevitably do have social consequences and public outcomes. When these derive from purely personal preferences, the results are often irrational and unintended, at wide variance with the kind of society we might choose through democratic deliberation. Such private choices, though technically “free,” are

²⁰ See Melissa Gorrie, “Regulating our Consumer Culture: What Role Can the Law Play in Addressing Excessive Consumption?” in Volker Mauerhofer et al, eds, *Sustainability and Law: General and Specific Aspects* (Cham: Springer Nature Switzerland AG, 2020) at 119.

²¹ Benjamin R Barber, “Shrunken Sovereign: Consumerism, Globalization, and American Emptiness” (2008) 170:4 *World Affairs* 73 at 73–74.

²² See M Lee et al, “Does the Individualist Consume More? The Interplay of Ethics and Beliefs that Governs Consumerism Across Cultures” (2010) 93:4 *J Bus Ethics* 567–581.

²³ L Lebreton et al, “Evidence that the Great Pacific Garbage Patch is rapidly accumulating plastic” (2018) 8 *Scientific Reports*.

²⁴ See e.g. Suzanne Reimer & Deborah Leslie, “Identity, Consumption, and the Home” (2010) 1:2 *Home Cultures* 187 and María Eugenia Perez et al, “Constructing identity through the consumption of counterfeit luxury goods” (2010) 13:3 *Qualitative Market Research* at 219.

²⁵ See Zlynet Boz et al, “Considerations for the Implementation of Sustainable Packaging: A Review” (2020) 12 *Sustainability* 2192.

²⁶ See “Canada’s Core Public Infrastructure Survey: Wastewater and solid waste assets, 2016” (14 November 2018), online: *Statistics Canada* <www150.statcan.gc.ca/n1/daily-quotidien/181114/dq181114b-eng.htm>.

quite literally dysfunctional with respect to our values and norms. Privatization means the choices we make eventually determine the social outcomes we must suffer together, but which we never directly choose in common.²⁷

The choices informed by seemingly limitless consumption have, no doubt, political and environmental consequences. While Canada's vast geography means that space for waste disposal is in seemingly ample supply, it cannot in reality even sustain the disposal of its own garbage production. Even in the abstract, residents understandably do not want landfills and dumpsites to be located near their communities—who would?²⁸ Landfills and dumpsites are noisy, smelly, ugly, and can be huge. The Keele Valley Landfill, located north of Toronto and, at the time of its closing, the largest dump in Canada, was a gigantic 240 acres in size and 75 metres deep.²⁹ The infamous and now-closed Fresh Kills landfill site on Staten Island, New York, for a second example, is so gigantic that it has been rumoured to be visible from space.³⁰

The size alone of these massive dump sites does not capture the extent to which they are harmful or the manner in which they produce the social and environmental consequences we address here. In addition to being detrimental to Canadian landscapes and ecosystems, landfills and dumpsites simultaneously cause serious environmental problems that may easily become health hazards.³¹ Examples include significant contributions to the production of greenhouse gas emissions,³² the bioaccumulation of harmful chemicals in wildlife populations,³³ and the pollution of groundwater, a primary source of drinking water for Canadian communities.³⁴

Nevertheless, once packaging is produced for consumer products, it must go *somewhere*, and so as long as it continues to be excessively or unnecessarily produced from durable materials, landfills and dumpsites will proliferate, as will the associated environmental effects and costs. This will occur even if some measure of it is recycled. As recently as 2017, over 70 percent of “products at their end-of-life, packaging, and other waste” were sent to landfills in Ontario,³⁵

²⁷ See Barber, *supra* note 21 at 75.

²⁸ See “Municipal Waste Generation” (2020), online: *The Conference Board of Canada* <conferenceboard.ca/hcp/Details/Environment/municipal-waste-generation.aspx?AspxAutoDetectCookieSupport=1>.

²⁹ See “Canada's largest landfill closes”, *CBC News* (31 December 2002), online: <cbc.ca/news/canada/canada-s-largest-landfill-closes-1.333636>. See also Shawn Micallef, “Toronto a city of garbage”, *The Toronto Star* (7 February 2014), online: *The Toronto* <thestar.com/life/2014/02/07/toronto_a_city_of_garbage.html>.

³⁰ See Kate Ascher & Frank O'Connell, “From Garbage to Energy at Fresh Kills”, *The New York Times* (15 September 2013), online: <archive.nytimes.com/www.nytimes.com/interactive/2013/09/15/nyregion/from-garbage-to-energy-at-fresh-kills.html>.

³¹ See PJ Young & A Parker, “The Identification and Possible Environmental Impact of Trace Gases and Vapours In Landfill Gas” (1983) 1:3 *Waste Management & Research* 213.

³² See Rahim A Mohsen & Bassim Abbassi, “Prediction of Greenhouse Gas Emissions from Ontario's Solid Waste Landfills Using a Fuzzy Logic Based Model” (2020) 102 *Waste Management* 743 (“[e]missions from Canadian landfills account for 20% of national methane emissions” at 743).

³³ See Heidi Currier et al, “Bioaccumulation and biomagnification of PBDEs in a terrestrial food chain at an urban landfill” (2020) 238 *Chemosphere* at 247.

³⁴ See Conglian Pan, Kelvin Ng & Amy Richter, “An integrated multivariate statistical approach for the evaluation of spatial variations in groundwater quality near an unlined landfill” (2019) 26:6 *Environmental Science & Pollution Research* at 5724.

³⁵ Ontario, Ministry of the Environment and Climate Change, *Strategy for a Waste-Free Ontario: Building*

a phenomenon explained in part by many Canadians' lack of access to recycling facilities³⁶ and by a poor market for recycled plastics and other materials.³⁷

Not all non-recycled waste from consumer goods and their packaging ends up in landfills and dumpsites, however. Some of it also finds its way into Canadian lakes and oceans, and, in 2018, a study estimated that the Garbage Patch contained at least 79,000 tonnes of ocean plastic floating inside an area of 1.6 million km².³⁸ Notably, this Garbage Patch is only one example of a phenomenon that is replicated elsewhere.³⁹ Its size and growth are emblematic of the particular problem posed by plastic pollution in bodies of water: it is incredibly difficult to clean up and researchers have estimated that "it would take 67 ships an entire year to clean up less than one percent of the North Pacific Ocean."⁴⁰ A recent film streaming on Netflix titled "Seaspiracy" aimed to show the devastating consequences plastic waste has had on marine life and habitat.⁴¹

An estimated eight million tonnes of plastic waste enters the oceans annually,⁴² and the North American Great Lakes are exposed to approximately 10,000 metric tonnes of plastic waste during the same period of time.⁴³ Plastic pollution is thus a problem in the Great Lakes, which is critical because that lake system contains one-fifth of the world's fresh water and is one of the world's most valuable natural resources.⁴⁴ The concentration of Canada's population around the Great Lakes continues to make these waters particularly vulnerable to pollution, yet a dearth of data exists regarding the impacts of this pollution on aquatic resources and ecologies.⁴⁵ Excessive plastic pollution is thus both symptomatic and emblematic of the

the Circular Economy (Strategy) (Ontario: Queen's Printer for Ontario, 2017) at 25 [Ontario Circular Economy].

³⁶ See CM Consulting, "Estimates of Levels of Residential Recycling Access for Plastic Packaging in Canada" (April 2009), online (pdf): <www.plastics.ca/?f=file_Clarissa_EPIC_Access_FINAL_REPORT2_2009.pdf&n=file_Clarissa_EPIC_Access_FINAL_REPORT2_2009.pdf> [CM Residential Recycling]; Laurie Giroux, "State of Waste Management in Canada: Prepared for Canadian Council of Ministers of Environment" (2014) PN 1528, online (pdf): *Giroux Environmental Consulting* <www.nswai.org/docs/State_Waste_Mgmt_in_Canada.pdf>.

³⁷ See Chantal Carriere & Rachael Horn, "The Case for a Legislated Market in Minimum Recycled Content for Plastics" (2020) 50:1 *Environmental L Reporter* 10042.

³⁸ See Lebreton, *supra* note 23.

³⁹ See Emily Petsko, "3 misconceptions about the Great Pacific Garbage Patch" (9 September 2019), online: *Oceana* <oceana.org/blog/3-misconceptions-about-great-pacific-garbage-patch> [Petsko] (for example, plastic garbage also litters the ocean floor: "[t]here is now, on average, an estimated 70 kilograms of plastic in each square kilometer of seafloor").

⁴⁰ *Ibid.*

⁴¹ See A Tabrizi, "Seaspiracy" (2021), online (video): Netflix <www.netflix.com/search?q=seasp>.

⁴² See Canadian Council of Ministers of the Environment, "Strategy on Zero Plastic Waste" (2009) at PN 1499, online (pdf): *CCME* <www.ccme.ca/files/Resources/waste/plastics/STRATEGY%20ON%20ZERO%20PLASTIC%20WASTE.pdf>.

⁴³ See "Talking Trash: Canada's Plastic Pollution Problem" (2018), online (pdf): *Environmental Defence* <d36rd3gki5z3d3.cloudfront.net/wp-content/uploads/2018/10/FINAL-Talking-Trash-Primer-Oct-2018.pdf?x88828>.

⁴⁴ See Rachel N Cable et al, "Distribution and Modeled Transport of Plastic Pollution in the Great Lakes, the World's Largest Freshwater Resource" (2017) 5:45 *Frontiers in Environmental Science* at 2.

⁴⁵ *Ibid* at 13.

excessive product packaging problem as much as it is of plastic pollution itself.

Another consequence of excessive individualism coupled with seemingly limitless consumerism seen in an ever-globalizing world is air pollution, which is considered “a major public health issue with a number of epidemiological studies reporting the impact of diverse air pollutants on both morbidity and mortality.”⁴⁶ That is, air pollution makes people sicker (or more susceptible to contracting multiple diseases, such as cardiovascular and respiratory illnesses)⁴⁷ and more likely to die.⁴⁸ Notably, air pollution is caused in part by the production and disposal of consumer (including food) packaging.⁴⁹ While levels of air pollution in Canada are modest when compared with those expressed in the globe’s most densely populated regions, such as China,⁵⁰ Canadian air pollution is still harmful enough that provinces and municipalities are investing into early-warning systems for days during which air pollution is particularly dangerous.⁵¹ Studies have shown that “adverse effects of outdoor air population [occur] at concentrations that were below existing North American standards for children.”⁵² Although Canada as a whole incinerates only a modest amount of waste, these emissions nevertheless pollute the atmosphere⁵³ and contribute to climate change. Thus, although it is possible to discuss pollution and its effects in isolation (by focusing on type or on a particular region, for example) the nature of pollution is such that it defies borders while having multiple, simultaneous impacts on interrelated *global* systems.⁵⁴ This reality is exemplified by the fact that air pollution in China can create respiratory problems for people in Canada (and vice versa), with Canadian consumerism having a direct, positive correlation with air pollution in China—where many products consumed by Canadians are made.⁵⁵

⁴⁶ Pierre Masselot et al, “Toward an Improved Air Pollution Warning System in Quebec” (2019) 16:12 *Intl J Environmental Research & Public Health* 2095.

⁴⁷ See Sanvi Tang et al, “Measuring the impact of air pollution on respiratory infection risk in China” (Report) (2018) 232 *Environmental Pollution* 477 at 477.

⁴⁸ See Gerard Hoek et al, “The Association between Air Pollution and Heart Failure, Arrhythmia, Embolism, Thrombosis, and Other Cardiovascular Causes of Death in a Time Series Study” (2001) 12:3 *Epidemiology* 355.

⁴⁹ See “The Environmental Impact of Food Packaging: From plastics in our waterways to the toxic environmental impact of food packaging”, online: *FoodPrint* <foodprint.org/issues/the-environmental-impact-of-food-packaging/#:~:text=Air%20Pollution%20from%20Food%20Packaging,is%20typically%20landfilled%20or%20incinerated.&text=Landfills%20emit%20ammonia%20and%20hydrogen,dioxides%2C%20nitrous%20oxides%20and%20particulates>. See also Kenneth Marsh & Betty Bugusu, “Food Packaging and Its Environmental Impact” (April 2007) 72:3 *J Food Science* 46.

⁵⁰ See Tang et al, *supra* note 47 at 477 ([scientists can predict] “[w]ith uninterrupted rapid economic development for nearly 30 years, China is now experiencing major public health challenges due to environmental changes... [and] a particular issue is air pollution... and its impact on health,” which both generally continue to increase in prevalence and severity” at 477).

⁵¹ See Masselot, *supra* note 46 at 2.

⁵² *Ibid.*

⁵³ See “Canadian Environmental Sustainability Indicators: Solid waste diversion and disposal” (December 2018), online: *Government of Canada* <canada.ca/content/dam/eccc/documents/pdf/cesindicators/solid-waste/2018/solid-waste-diversion-disposal-en.pdf>.

⁵⁴ See Qiang Zhang et al, “Transboundary health impacts of transported global air pollution and international trade” (2017) 543 *Nature* 705.

⁵⁵ See Larry Pynn, “Pollution from China harming air quality on West Coast: study” (2014), online: *Times*

In a similar vein, while highly visible examples of pollution in the form of massive garbage dumps, clouds of smog, and swirling mires of plastic garbage draw a great deal of media attention, invisible pollution may be the most insidious and harmful.⁵⁶ Consider the prevalence of micro plastics (pieces of plastic less than 5mm long),⁵⁷ of which the Garbage Patch is primarily composed,⁵⁸ virtually everywhere in the oceans⁵⁹ as well as in the Great Lakes.⁶⁰ It is the microscopic size of those particles that makes any clean-up of the Garbage Patch so daunting⁶¹ and that permits their entry into food chains, ecosystems and therefore into human bodies.⁶² Additionally, consider that every piece of trash that found its way into the Garbage Patch or even to a local garbage dump is also composed of resources that were extracted, processed, and sold—not to mention transported several times via fossil fuel technologies and producing additional associated emissions, making the environmental costs of producing, using, and disposing of that packaging that much more ecologically expensive.⁶³

These observations show that the problem posed by excess packaging is pervasively at odds with the anti-environmental—even narcissistic—mixture of individualism and consumerism in the globalized world.⁶⁴ That is, the problem is exacerbated by these attitudes because pollution's impacts are far-reaching, cyclical, and interconnected.⁶⁵ This amplification reflects the cycle of consumption, in which consumerism and individuality drives people to purchase the latest gadget, style, or other “thing,” then instantly abandoning the item's predecessor—the ubiquitous Apple iPhone being a good example.⁶⁶ This cycle of consumerism and its consequences are exemplified by the literal mounds of toxic electronic waste, or e-waste,

Colonist <timescolonist.com/entertainment/books/pollution-from-china-harming-air-quality-on-west-coast-study-1.799215>.

⁵⁶ See Reece Walters, “Air Pollution and Invisible Violence” in P Davies et al (eds) *Invisible Crimes and Social Harms: Critical Criminological Perspectives* (London: Palgrave Macmillan, 2014).

⁵⁷ See Cable et al, *supra* note 44.

⁵⁸ See Diana Parker, “The Great Pacific Garbage Patch” (24 June 2016), online (transcript of podcast): *National Ocean Services* <oceanservice.noaa.gov/podcast/june14/mw126-garbagepatch.html>.

⁵⁹ *Ibid.*

⁶⁰ See Cable et al, *supra* note 44 (“[f]ield surveys have confirmed the presence of microplastics in Great Lakes surface water, ... sediment,... and beaches,... as well as the rivers... and wastewater treatment plant... effluents that directly feed into the Great Lakes” at 2).

⁶¹ See Petsko, *supra* note 39.

⁶² See Montserrat Filella & Andrew Turner “Observational Study Unveils the Extensive Presence of Hazardous Elements in Beached Plastics from Lake Geneva” (2018) 6:1 *Frontiers in Environmental Science* (“[s]ignificantly, small suspended plastics may be ingested by organisms. Mistaking items for food, with chemical accumulation occurring...” at 7).

⁶³ See Christy Mihyeon Jeon & Adjo Amekudzi, “Addressing Sustainability in Transportation Systems: Definitions, Indicators, and Metrics” (2005) 11:1 *J Infrastructure Systems* 31 at 33.

⁶⁴ See Derek Conrad Murray, “Selfie consumerism in a narcissistic age” (2020) 23:1 *Consumption Markets & Culture* 21.

⁶⁵ See Andrej Ficko & Andrej Bončina, “Public attitudes toward environmental protection in the most developed countries: The Environmental Concern Kuznets Curve theory” (2019) 231:1 *J Environmental Management* 968.

⁶⁶ See Robert Crocker, *Somebody Else's Problem: Consumerism, Sustainability and Design* (New York: Routledge, 2017); Gilbert Van Kerckhove, *Toxic Capitalism: The Orgy of Consumerism and Waste: Are We the Last Generation on Earth?* (Bloomington, Ind: AuthorHouse, 2012).

produced each year as cellphones are discarded in favour of ever newer models.⁶⁷ More common individual cheese slice wrappers, tinfoil or wax paper from packages of chewing gum, boxes of chocolate or children's toys depict the same phenomenon.

The blame does not lie only, or even primarily, with consumers. While residential waste production in Canada was rising in 2016, the last year for which data was available, non-residential waste was declining, and the majority of waste was still produced by industrial, not residential, sources.⁶⁸ Systemic factors play an important role too; a 2016 report noted that a significant number of types of plastic are recycled at low rates because residents of many geographic areas simply lack access to facilities that can recycle them.⁶⁹ Some people *want* to recycle but are not provided with the means to do so. Far from the context of recycling technological products, a stroll through downtown Thunder Bay, Ontario, for example, shows that the city's "recycling" bins are lined with black trash bags, just like the garbage cans placed next to them, making the fate of "recyclables" deposited inside suspect or perhaps even dubious.⁷⁰ Both present authors have lived in remote communities in Ontario and Nunavut that have *no access* to recycling facilities or services whatsoever.⁷¹ Practices resulting in lack of access to recycling programs means that plastic containers (and other trash) inevitably and unnecessarily wind up in garbage dumps or patches rather than re-entering the environment or the economy in some recycled or repurposed form.

The problem posed by excessive packaging, waste and pollution is thus multi-faceted, systemic, and shared by all members of the global community, though not all are equally affected. Therefore, in our estimation, what is required—at least at the national level—is an equally multi-faceted, systemic, and shared response to reduce how much packaging is produced, which would lower not only the amount of pollution created, but also the amount of resources that are extracted and transported for packaging production. Stringent regulations around waste disposal could also be instrumental, but these are secondary to our concern here. The current law around packaging in Canada inadequately addresses the serious threat that unnecessary and excessive packaging poses to the health of people and the environment, a discussion we undertake in the next section.

⁶⁷ See Joe McCarthy, "Recycling Your Old Cell Phone; Here's What Happens" (18 June 2018), online: *Global Citizen* <www.globalcitizen.org/en/content/recycle-cellphones-ewaste-what-happens/>; see also Amit Kumar et al, "E-waste: An overview on generation, collection, legislation and recycling practices" (2017) 122 *Resources, Conservation & Recycling* 33.

⁶⁸ See Statistics Canada DoW, *supra* note 5.

⁶⁹ See CM Consulting, "Canadian Residential Plastics Packaging: Recycling Program Access Report" (August 2016) at 8.

⁷⁰ The City of Thunder Bay does, however, have a recycling program. See online at www.thunderbay.ca/en/city-services/garbage-and-recycling.aspx#

⁷¹ One author found the experience of teaching public school in communities with no access to recycling especially jarring; imagine the huge quantities of paper used by classrooms being simply thrown away and the message that that sends to young students. In Nunavut, there is no recycling program; however, an Environmental Protection Act exists: see *Environmental Protection Act*, RSNWT (Nu) 1988, c E-7 (as duplicated for Nunavut). Iqaluit, the capital of Nunavut, experienced a dumpster fire (which contained unrecycled glass, metals, and plastics) raged for weeks and was referred to as "dumpcano." See Aaron Watson/The Canadian Press, "Iqaluit's long-smouldering 'dumpcano' garbage fire finally out," *The Globe and Mail* (14 September 2014) online: <theglobeandmail.com/news/national/iqaluits-long-smouldering-dumpcano-garbage-fire-finally-out/article20620273/>.

3. DOMESTIC LAW

3.1. THE JURISDICTIONAL QUESTION

Both practical realities and Canada's Constitution would need regulatory responsibilities regarding the reduction of packaging pollution to be shared by the federal, provincial/territorial, and even municipal governments for legal efficiency.⁷² Just as the effects of pollution caused by excess packaging extend across borders, so too must efforts to address those effects which involve collaboration across national (and eventually international) jurisdictions.⁷³ This reality is perhaps why "jurisdiction over the environment has long been regarded as divided between provinces and the federal government."⁷⁴ For instance, it would be nonsensical to make the federal government responsible for the collection of municipal garbage; that responsibility logically rests with municipal governments. Likewise, the federal government is suitably positioned to assume responsibility for environmental emergencies which "have or may have an immediate or long-term harmful effect on the environment; constitute or may constitute a danger to the environment on which human life depends; or constitute or may constitute a danger in Canada to human life or health,"⁷⁵ given the oversight that it assumes in other areas of national governance. Further, given the diversity in the population density, i.e. Canadian regionalism, and environmental composition of the provinces and territories, provincial and territorial governments are best equipped to respond to environmental concerns that are primarily "matters of a merely local or private nature"⁷⁶ or that occur on the public lands the management of which provincial and territorial governments are explicitly responsible.⁷⁷

The Canadian Council of Ministers for the Environment ("CCME") recognized the necessity that all levels of Canadian government share responsibilities for environmental protection in advocating for the implementation of its *Action Plan for Extended Producer Liability* ("EPR").⁷⁸ What is constitutionally⁷⁹ and practically essential is a sharing of regulatory responsibilities among provinces and municipalities (who are ultimately responsible for waste management) as well as the federal government. As the Ministers that form the CCME opined,

⁷² See e.g. *Canadian Environmental Protection Act*, SC 1999, c 33, s 90(1) [*CEPA*] (granting the Federal Government the power to regulate toxic substances); *Environmental Protection Act*, RSO 1990, c E19, s 4 [*EPA* RSO] (granting the Ontario Minister of the Environment the authority to administer and enforce provincial environmental regulations including investigating "problems of pollution, waste management, waste disposal, litter management and litter disposal"); and *ibid*, s 138 (requiring the Director to serve notice of their order or decision "on the clerk of any municipality in which there is land on which the order or decision requires something to be done, permits something to be done or prohibits something from being done," illustrating that more local environmental protection responsibilities are shared by provincial and municipal governments).

⁷³ See David Cameron & Richard Simeon, "Intergovernmental Relations in Canada: The Emergence of Collaborative Federalism" (2002) 32:2 *Publius: J Federalism* 49 at 55.

⁷⁴ DV Write, "Options for Oversight in the Provincial Environmental Realm: Examples and Functions of Independent Environmental Oversight Offices" (2016) 29 *J Envtl L & Prac* 203 at 203.

⁷⁵ *CEPA*, *supra* note 72, s 193.

⁷⁶ *Constitution Act, 1867* (UK), 30 & 31 Victoria, c 3, s 92(16) [*Constitution Act*].

⁷⁷ *Ibid*, s 92(5).

⁷⁸ See Extended Producer Responsibility PN 1499, *supra* note 3 at 2-3.

⁷⁹ See *Constitution Act*, *supra* note 76, ss 91, 92(5), 92(16).

“[r]esponsibilities for many products and product categories will fall exclusively within the legislative mandates of provinces and territories under their authorities to manage municipal solid waste [...]. In other cases, authority may reside with the federal government if the product contains a toxic substance or is itself a toxic substance, scheduled under the terms of the *Canadian Environmental Protection Act*, 1999 (“EPA”).”⁸⁰ Further, the CCME held

[r]ecognizing that authority for the regulation and establishment of EPR programs exists with both provincial/territorial governments and with the federal government, responsibilities for initiating and regulating an EPR approach will fall to the jurisdiction or jurisdictions that are best placed to act in accordance with the vision and goals of the [Canadian Action Plan; see below].⁸¹ In both cases harmonization and collaboration are essential.⁸²

This political posture is merely, however, an extension of the collaboration that already exists among federal, provincial, territorial, and municipal governments respecting waste management.⁸³ It recognizes the fact that, again, while waste management is *primarily* of “merely local or private nature,”⁸⁴ the integrated and global nature of the world’s environmental systems also brings it within residual federal powers as a matter of national concern.⁸⁵ Such an approach is also supported by the doctrine of cooperative federalism, a fundamental guiding principle of our justice system.⁸⁶

The importance of cooperative federalism in protecting the environment has been established previously, for example, in the context of the so-called “carbon tax,”⁸⁷ even though the Supreme Court of Canada decided in the *Reference re Greenhouse Gas Pollution Pricing Act* that under the national concern doctrine and its Peace, Order, and Good Government (“POGG”) power power, the federal government was within its constitutional jurisdiction

⁸⁰ See Extended Producer Responsibility PN 1499, *supra* note 3 at 14.

⁸¹ *Ibid.*

⁸² *Ibid.*

⁸³ See “Municipal solid waste: a shared responsibility” (26 November 2018), online: *Government of Canada* <canada.ca/en/environment-climate-change/services/managing-reducing-waste/municipal-solid/shared-responsibility.html> [Canada Municipal Solid Waste] (In Canada, the responsibility for managing and reducing waste is shared among federal, provincial, territorial and municipal governments... [T]he Government of Canada complements the activities of the other levels of government by controlling international and interprovincial movements of hazardous waste and hazardous recyclable material, as well as identifying best practices that will reduce to a minimum the possible pollution from the management of waste”).

⁸⁴ Constitution Act, *supra* note 76.

⁸⁵ *Ibid.*, s 91.

⁸⁶ See *Canadian Western Bank v Alberta*, 2007 SCC 22.

⁸⁷ See Nathalie J Chalifour, “Making Federalism Work for Climate Change: Canada’s Division of Powers over Carbon Taxes” (2008) 22 NJCL 119 (“[i]t is clear that climate change action in Canada will need to be the product of coordinated efforts between the federal and provincial governments in Canada and... tools of interjurisdictional co-operation will certainly be used” at 148); see also David Cameron & Richard Simeon, “Intergovernmental Relations in Canada: The Emergence of Collaborative Federalism” (2002) 32:2 *Publius: J Federalism* 49; Dayna Nadine Scott, “The Environment, Federalism, and the Charter” in Peter Oliver et al, eds, *The Oxford Handbook of the Canadian Constitution* (Oxford, UK: Oxford University Press, 2017).

to impose a carbon regulatory charge (not a “tax”).⁸⁸ Determinations of the constitutionality of laws respecting packaging, like all laws, depends first on those laws’ pith and substance, or central purpose.⁸⁹ Such an analysis asks first whether what the essential character of the law is, and second, whether that character relates to an enumerated head of power granted to the legislature in question by the *Constitution Act, 1867*.⁹⁰ Given that the federal and provincial/territorial governments could enact statutes that address the problems posed by excess packaging so long as those statutes were carefully designed to fit within the appropriate powers,⁹¹ the federal and provincial and territorial governments could coordinate a cooperative and collaborative response mindful of the limits of each’s constitutional jurisdiction. Interjurisdictional conflict would, as one legal scholar argues, be reduced “by careful drafting of legislation as well as by co-operation among the jurisdictions”⁹² in the context of eliminating excess packaging just as it may be achieved in the context of carbon taxation. That is because the context is the same: protection of the environment against a threat that defies borders and therefore requires a response “that is multi-faceted and requires a range of complimentary policies,” including those that apply across the entire economy.⁹³ Further, just as the proper characterization of legislation respecting carbon regulation for the purposes of the division of powers legislative analysis may be focused on whether the impugned legislation is a treaty-implementing measure,⁹⁴ so too might the proper characterization of legislation regarding packaging. While such a characterization would still not permit the federal government to impinge upon matters enumerated in the Constitution as belonging to provincial/territorial governments,⁹⁵ it could provide the federal government with the legal grounds to perform the function that the CCME suggested it fulfil: one of leadership.⁹⁶ As Chief Justice Wagner held:

Although early Canadian constitutional decisions by the Judicial Committee of the Privy Council applied a rigid division of federal-provincial powers as watertight compartments, this Court has favoured a flexible view of federalism—what is best described as a modern form of cooperative federalism—that accommodates and encourages intergovernmental cooperation [...]. That being said, the Court has always maintained that flexibility and cooperation, while important to federalism, cannot override or modify the constitutional division of powers. As the Court remarked [...] “[t]he ‘dominant tide’ of flexible federalism, however strong its pull may be, cannot sweep designated powers out to sea, nor erode the constitutional balance inherent in the Canadian federal state [...].”⁹⁷

Finally, the Double Aspect doctrine may prove of instrumental legal utility should a particular piece of legislation be passed that is properly categorized under both federal and

⁸⁸ See *References re Greenhouse Gas Pollution Pricing Act*, 2021 SCC 11 [*References re GGPPA*].

⁸⁹ See Chalifour, *supra* note 87 at 148.

⁹⁰ See *References re GGPPA*, *supra* note 88 at para 47; *Ward v Canada (AG)*, 2002 SCC 17 at para 16.

⁹¹ See Chalifour, *supra* note 87 at 148.

⁹² *Ibid.*

⁹³ *Ibid* at 129.

⁹⁴ *Ibid* at 150.

⁹⁵ *Ibid.*

⁹⁶ See Extended Producer Responsibility PN 1499, *supra* note 3 at 14.

⁹⁷ *References re GGPPA*, *supra* note 88 at para 50.

provincial heads of power. This is “possible, and indeed common,” and makes it crucial to determine the legislation’s dominant (as opposed to incidental) purpose.⁹⁸ Should such an outcome occur with respect to a particular piece of packaging legislation, the determination of whether the government that passed the law was *intra* or *ultra vires* would depend on “efficiency (which level of government is most effectively able to address [the] issues) and democratic values, such as diversity, accountability and responsiveness.”⁹⁹ Given the fluidity of pollution and the context of Canada’s international environmental obligations, it makes sense that federal laws passed with the specific purpose of addressing international environmental issues or fulfilling Canada’s international environmental obligations, discussed below, among which packaging regulation is included, would be found *intra vires* by the courts just as carbon regulation was in the *Reference re Greenhouse Gas Pollution Pricing Act*.¹⁰⁰

3.2. FEDERAL STATUTES AND ACTIONS

The federal *EPA* makes no reference at all to “packaging” (or similar terms), although the terms “waste” and “pollution” are used extensively. The legislation’s focus seems generally to be on acute manifestations of pollution, such as the control of toxic substances,¹⁰¹ rather than the slow accumulation of trash in dumps and patches. Although it is possible that sections referring to toxic substances could apply to excess packaging, which is arguably “inherently toxic” in that it may “have an immediate or long-term harmful effect on the environment or its biological diversity, constitute a danger to the environment on which life depends, or constitute a danger in Canada to human life or health,”¹⁰² these provisions seem to have the primary purpose of eliminating certain *types* of substances from our economy, while ignoring the fact that massive quantities of any or a mixture of substances can have similar harmful effects on people and environments. The “virtual elimination” of toxic substances¹⁰³ is certainly necessary. Nonetheless, as stated above, given that the management of municipal solid waste is primarily a municipal and provincial responsibility,¹⁰⁴ the doctrine of federal paramountcy could perhaps be invoked here should other options discussed below prove unfeasible.¹⁰⁵ The doctrine could be employed to require corporate and producer compliance with actions aimed at pursuing a goal in lines with the current application of the *EPA*, specifically by recognizing the toxicity of excessive packaging and requiring more stringent action to be taken to eliminate its production. These actions would be, namely, reducing the size or amount of packaging of

⁹⁸ Chalifour, *supra* note 87 at 144.

⁹⁹ *Ibid.*

¹⁰⁰ See *References re GGPPA*, *supra* note 88 at paras 89–119.

¹⁰¹ *Ibid.*, s 64.

¹⁰² *Ibid.*

¹⁰³ *Ibid.*, s 65(1).

¹⁰⁴ See Constitution Act, *supra* note 76, s 92(16).

¹⁰⁵ See *References re GGPPA*, *supra* note 88 (“[t]he double aspect doctrine takes on particular significance where, as in the case at bar, Canada asserts jurisdiction over a matter that involves a minimum national standard imposed by legislation that operates as a backstop. The recognition of a matter of national concern such as this will inevitably result in a double aspect situation. This is in fact the very premise of a federal scheme that imposes minimum national standards: Canada and the provinces are both free to legislate in relation to the same fact situation—in this case by imposing GHG pricing—but the federal law is paramount” at para 129).

consumer and other products.

Similarly, the federal *EPA's* focus on maintaining the cleanliness of waterways and oceans¹⁰⁶ could serve as justification or jurisdiction to eliminate the production and use of excess packaging, because, as discussed above, huge amounts of plastic packaging wind up in bodies of water (a matter of federal jurisdiction). This statute's complete silence regarding packaging is at odds with the federal government's declaration that its role in waste management includes "identifying best practices that will reduce *to a minimum* the possible pollution from the management of waste."¹⁰⁷

Most other federal laws that impact packaging appear to be aimed at consumer, not environmental, protection. Further, it is the proverbial thickness of consumers' *wallets* and not their health that appears to be the paramount governmental focus. To that end, the federal *Consumer Packaging and Labeling Act* grants the Governor-in-Council powers to make regulations "establishing packaging requirements that limit the sizes and shapes of containers" in which prepackaged goods are sold, but only where they have the opinion that "there is an undue proliferation of sizes or shapes of containers" that may mislead or confuse consumers with respect to the amount of product contained within.¹⁰⁸ The "mischief" sought to be prevented is not excessive or unnecessary packaging, but consumer deception.

Other federal statutes have the apparent goal of protecting consumer safety or health. For example, the *Food and Drug Regulations* set standards for the chemical composition of packaging with a specific concern for materials that could leave a residue on food products.¹⁰⁹ However, these provisions have no impact on the production of excessive amounts of unnecessary packaging and the pollution that it ultimately and almost inevitably produces.

3.3. THE CANADIAN COUNCIL OF MINISTERS FOR THE ENVIRONMENT

In 2009, the CCME produced a *Canada-wide Action Plan for Extended Producer Responsibility* ("Action Plan")¹¹⁰ and a *Canada-wide Strategy for Sustainable Packaging* ("Strategy"),¹¹¹ which led to a number of legislative changes in Ontario and elsewhere. It is notable—ironic even—that more than a decade ago, the CCME identified packaging as requiring better management¹¹² and indicated that the responsibility for waste packaging should be placed on those who produce it, following in the footsteps of Germany, a leader in waste management and reduction¹¹³—a nation which emphasizes high recycling rates, efficient waste-to-energy systems, advanced and widespread use of biological methods for treating

¹⁰⁶ See *CEPA*, *supra* note 72, s 118(1) (focuses on preventing or reducing "the growth of aquatic vegetation that is caused by the release of nutrients in waters," for example).

¹⁰⁷ Canada Municipal Solid Waste, *supra* note 85 [emphasis added].

¹⁰⁸ *Consumer Packaging and Labeling Act*, RSC 1985, c C-38, s 11(1).

¹⁰⁹ See *Food and Drug Regulations*, CRC, c 870, ss B.23.001–B.23.008.

¹¹⁰ See Extended Producer Responsibility PN 1499, *supra* note 3.

¹¹¹ See Canadian Council of Ministers of the Environment, *Canada-wide Strategy for Sustainable Packaging* (Strategy), PN 1501 (Canada: October 29, 2009) [Sustainable packaging PN 1501].

¹¹² See Extended Producer Responsibility PN 1499, *supra* note 3 at 10.

¹¹³ *Ibid* at 2.

organic waste as well as relatively high quality of waste segregation at source,¹¹⁴—but has really done very little to promote or achieve such goals.

The Strategy notes that materials used in packaging “are often used just once, and [that] manufacturing packaging consumes significant quantities of energy and resources” as well as consumer concern about “packaging waste and resource use” and a consumer demand for reduced packaging.¹¹⁵ In contrast, the Action Plan calls for a broad and integrated approach to the reduction of packaging, including the establishment of an industry-government working group “to provide a forum for greater dialogue and to facilitate implementation” of the strategy¹¹⁶ and is intended to “provide guidance for provincial/territorial regulators.”¹¹⁷

The Action Plan encourages jurisdictions to “track and set targets for [...] performance indicators such as: [*p*]ackaging reduction—amount of packaging materials (by weight) introduced into the market relative to annual sales of packaged products [...] [and] [*p*]roduct to packaging ratios—the average relationship between the weight or volume of a product and the weight of its packaging,”¹¹⁸ leaving aside the question of individual proportion in each unit of production. As stated above, because this Strategy is intended to provide guidance to provinces/territories, it would make sense for provincial statutes passed in response to it to focus on, or at least mention, those metrics. This does not appear to have happened. Perhaps this outcome can be partially explained by the fact that the Sustainable Packaging Coalition’s Definition of Sustainable Packaging, while including many important characteristics of sustainable packaging such as that it is made from “materials healthy in all probable end-of-life scenarios”¹¹⁹ mentions nothing of packaging to product ratios. It may also be due to the non-binding nature of the Action Plan and Strategy. These factors, and the provinces’ subsequent failure to adequately respond or adhere to the CCME’s Strategy and Action Plan, support the need for a more stringent, compliance-based form of regulation.

3.4. ONTARIO’S RESPONSE

While several jurisdictions enacted statutes in response to the CCME’s strategies, given that Ontario is the most populous Canadian province, with a population of 14,193,384 as of 2017,¹²⁰ and that its waste production was the highest in Canada, having produced in 2016 a total of 9,475,472 tonnes of waste,¹²¹ the authors focus on those strategies implemented in that province.¹²²

¹¹⁴ See Laura Schroeder & Kim Jeonghyun, “Germany’s Waste Management Policy Development” (Bonn and Eschborn: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, 2019) at 5.

¹¹⁵ Sustainable Packaging PN 1501, *supra* note 111 at i.

¹¹⁶ *Ibid* at iii.

¹¹⁷ *Ibid* at 1.

¹¹⁸ *Ibid* at 6.

¹¹⁹ *Ibid* at 9.

¹²⁰ See “Canada at a glance, 2019” (2019), online (pdf): *Statistics Canada* <www150.statcan.gc.ca/n1/pub/12-581-x/12-581-x2019001-eng.htm>.

¹²¹ See Extended Producer Responsibility PN 1499, *supra* note 3.

¹²² With the second largest population (8,394,034 people), Quebec is the second largest producer of waste in Canada. Quebec’s total waste production in 2008 was 6,146,319 tonnes, which has decreased to 5,356,134 tonnes in 2016. In terms of non-residential sources of waste, Quebec has seen a reduction

The Waste-Free Ontario Act (“WOA”)¹²³ was assented to in June 2016 and replaced the Waste Diversion Act, 2002. It enacted both the Resource Recovery and Circular Economy Act, 2016 (“RRCEA”)¹²⁴ and the Waste Diversion Transition Act, 2016.¹²⁵ Its purpose is to implement a circular economy, meaning an economy whose participants endeavour to minimize resource use and extraction, to maximize the useful life of products, and to minimize waste generation “at the end of life of products and packaging.”¹²⁶ The WOA explicitly links the protection of the natural environment with that of human health and the minimization of the generation of waste with both of those factors.¹²⁷ Further, it states that it is in the province of Ontario’s interest to hold persons who are most responsible for the design of products and packaging responsible for those products and packaging at the end of their product life.¹²⁸ This provision represents an attempt to alleviate pressure on consumers and governments with respect to waste disposal by encouraging those who produce packaging to do so judiciously. It is a proactive rather than a reactive measure, with particular attention paid to “convenience packaging,” which is “material used in addition to primary packaging” (packaging present at the point of sale) to facilitate transportation.¹²⁹ Convenience packaging (think boxes of smaller boxes) is perhaps by definition excessive in that it merely facilitates “convenience.” Those who produce or supply it or who own brands that are contained within it “may be required” to carry out certain responsibilities, including “reducing the amount of waste generated in connection” with the production of that packaging.¹³⁰ The use of permissive rather than mandatory language in the statute raises the question of enforcement, without which the effectiveness of these provisions may be questioned. And, once again, the statute does not restrict the size or amount of packaging that may be used to package a particular size or amount of product, i.e. product to packaging ratio, missing the crucial opportunity to minimize total waste production.

The WOA also required the Ontario Minister of the Environment and Climate Change to implement the “Strategy for a Waste-Free Ontario: Building the Circular Economy,”¹³¹ which was deployed in February 2017.¹³² The strategy explicitly links human health with environmental

between 2008 and 2016 of 3,297,497 tonnes to 2,346,051 tonnes. Similar to Ontario, Quebec residents are producing more waste than previous years, with residential sources of waste during this period increasing from 2,848,822 tonnes to 3,010,083 tonnes. British Columbia is smaller in both geographic area and population than Ontario and Quebec, so it should not be surprising that this province produces significantly less waste than Ontario and Quebec. In 2008, British Columbia produced 2,811,568 tonnes of waste, which was reduced to a total of 2,614,087 tonnes in 2016. Non-residential waste production was reduced from 1,851,097 tonnes in 2008 to 1,684,611 tonnes in 2016. And, unlike Ontario and Quebec, British Columbia’s residential waste has been gradually decreasing, with a reduction from 960,472 tonnes in 2008 to 929,476 tonnes in 2016. See Statistics Canada DoW, *supra* note 7.

¹²³ SO 2016, c 12 [WFOA].

¹²⁴ See *Resource Recovery and Circular Economy Act*, SO 2016, c 12, Sched 1.

¹²⁵ SO 2016, c 12, Sched 2.

¹²⁶ WFOA, *supra* note 123, s 1.

¹²⁷ *Ibid*, s 2(a), (d).

¹²⁸ *Ibid*, s 2(f).

¹²⁹ *Ibid*, s 59.

¹³⁰ *Ibid*, ss 62(1), 66, 67(1) [emphasis added].

¹³¹ *Ibid*, s 3(1).

¹³² See Ontario Circular Economy, *supra* note 35.

protection and the economy, stating that “sending valuable resources to landfill poses risks to both human and environmental health and leads to unpredictable pricing increases, supply chain risks and growing pressure on virgin materials.”¹³³ The recent COVID-19 pandemic makes this pressure on supply chains an urgent and important problem,¹³⁴ providing yet another reason to limit permissible packaging production to that which is actually necessary to serve packaging’s purposes: transportation, sale and the conveyance of product information.

The Strategy acknowledges the need for action at various points in the consumption cycle by calling for the creation of a circular, rather than a linear, economy: “a circular economy aims to eliminate waste... throughout the lifecycle of products and packaging. [It] aims to [do so] by improving the design of materials, products, and business models.”¹³⁵ The Strategy then calls for collaboration and emphasizes that “[p]roducers will save money by using less material and through better end-of-life management for products and packaging,”¹³⁶ yet ignores the fact that corporations are already almost exclusively-profit driven, calling into question whether they are producing excess packaging merely because the idea that minimizing packaging could save them money has simply not occurred to them.¹³⁷

The strategy’s claim that the *RRCEA* “establishes *full* producer responsibility by making producers environmentally accountable and financially responsible for recovering resources and reducing waste associated with their products and packaging”¹³⁸ is questionable given the fact that landfills continue to grow and large amounts of packaging continue to be produced. Further, while the strategy’s focus on increasing “the durability, reusability and recyclability of products and packaging”¹³⁹ is commendable, like the federal and provincial statutes examined above, the strategy is devoid of any mention of requiring a rational connection between the amount of packaging and the quantity of product it contains, which we argue is a grievously missed opportunity.

3.5. OTHER ONTARIO STATUTES

Other provincial statutes and regulations that refer tangentially to packaging, like federal ones, tend to focus on consumer (not environmental) protection: in Ontario, the *Farm Products Grades and Sales Act* empowers the Minister of Agriculture, Food and Rural Affairs to regulate the packaging of farm products and to permit and manage the use of “experimental”

¹³³ *Ibid* at 4.

¹³⁴ See Laura Clementson, “Food producers worry if supply chain can handle COVID-19 without migrant workers”, *CBC News* (18 March 2020), online: <cbc.ca/news/business/canada-supply-food-chain-1.5499479> (the stress on supply chains caused by the pandemic highlights the need to remove other, unnecessary stressors, such as that caused by unnecessary packaging, from these essential systems).

¹³⁵ See Ontario Circular Economy, *supra* note 35 at 4.

¹³⁶ *Ibid* at 6.

¹³⁷ See e.g. Elisa F Beitzen-Heineke, Nazmiye Balta-Ozkan & Hendrik Reefke, “The prospects of zero-packaging grocery stores to improve the social and environmental impacts of the food supply chain” (2017) 140 *J Cleaner Production* 1528; see also John Wu, Steve Dunn & Howard Forman, “A Study on Green Supply Chain Management Practices among Large Global Corporations” (2012) 10:1 *J Supply Chain & Operations Management* 182.

¹³⁸ Ontario Circular Economy, *supra* note 35 at 8 [emphasis added].

¹³⁹ *Ibid* at 15.

packaging.¹⁴⁰ The *Livestock and Livestock Products Act* provides similarly¹⁴¹ while the *Pest Control Products Regulations* sets out requirements for the packaging of pest control products, with the goal of ensuring safe handling, storage, and transportation.¹⁴²

An exception to the general focus on consumer rather than environmental protection exists in the Ontario *Environmental Protection Act* (“Ontario EPA”) and its regulations. For example, packaging produced using ozone depleting substances is prohibited.¹⁴³ This complete prohibition is comparatively successful because it is linked to an environmental achievement: the banning of ozone-depleting products (those that contain chlorofluorocarbons, or CFSs) in the 1980s resulted in reversal of harm previously done by them to the ozone layer.¹⁴⁴

Further, Part IX of Ontario’s EPA specifically deals with packaging and disposable products “that pose waste management problems” and empowers the Minister to conduct studies regarding the reduction of waste from packaging.¹⁴⁵ The Ontario EPA also prohibits the use or sale of packaging that contradicts the Act or its regulations¹⁴⁶ and permits the Lieutenant Governor in Council (“LGC”) to make regulations relating to refillable and returnable containers, prohibiting the use of certain materials in packaging, and “requiring persons who manufacture, package, or offer for sale or sell a packaged product to examine the impact of the packaging on [...] waste management.”¹⁴⁷ Such measures demonstrate some salience with respect to the impact packaging has on the environment but, again, do not specifically address packaging that is *excessive* in size or quantity relative to its contents.

Although shifting the responsibility of reducing waste associated with packaging onto its *producers* rather than assigning it solely to consumers or municipal or provincial/territorial governments seems to be a step in the right direction, requiring them only to “examine” associated environmental impacts may prove ineffective. This is because corporations may determine after such an “examination” that it is in their best interests, for one reason or another, to produce the wasteful packaging anyway.¹⁴⁸ Similarly, making the production of wasteful packaging an offence likely lacks efficacy unless the producers of such packaging are authentically penalized for the commission of such an offence, such as by proportioning fines

¹⁴⁰ RSO 1990 c F8, ss 2, 4.

¹⁴¹ RSO 1990, c L20, s 16 (this section refers not only to packaging and labelling but also to storage of livestock and livestock products, showing the legislature’s emphasis on consumer rather than environmental protection).

¹⁴² SOR/2006-124, s 33.

¹⁴³ See EPA RSO, *supra* note 72, s 59.

¹⁴⁴ See Mario Molina & Durwood J Zaelke, “A Climate Success Story to Build On”, *The New York Times* (25 September 2012), online: <nytimes.com/2012/09/26/opinion/montreal-protocol-a-climate-success-story-to-build-on.html>.

¹⁴⁵ EPA RSO, *supra* note 72, s 85(d) (specifically, such studies could inquire into “the environmental appropriateness of packaging, containers and disposable products, for instance; notably, there is no reference made to the size or amount of packaging relative to the size or amount of its contents, showing, perhaps, that this is a problem to which the legislature has not yet directed its attention).

¹⁴⁶ *Ibid*, s 88(1).

¹⁴⁷ *Ibid*, s 176(7).

¹⁴⁸ See Sonia Labatt, “Corporate Response to Environmental Issues: Packaging” (1997) 28:1 *Growth & Change: A J Urban & Regional Policy* 67 at 88.

to a corporation's annual revenue. Perhaps unsurprisingly, an extensive search of several legal databases revealed no case law related to section 88(1) of the Ontario *EPA*'s prohibition of the use or sale of packaging contrary to that Act. This fact emphasizes the importance that any amended environmental protection legislation ought to make remedies accessible to those impacted by corporate actions and be backed by sufficiently robust governmental enforcement mechanisms.

Elsewhere, the Ontario *EPA* empowers the LGC to impose additional duties on producers, such as submitting to examinations, providing waste management plans, or achieving waste management objectives regarding the packaging that they produce.¹⁴⁹ Still, no obligation or requirement is imposed on producers to ensure a minimal (or at least reasonable) amount of packaging relative to the package's contents. While the imposition of these duties may help to mitigate the environmental consequences of excessive packaging in aggregate, they appear to be primarily reactive rather than proactive and to again miss the crucial opportunity to prevent the production, transportation, and disposal of unnecessary packaging by simply limiting the amount that may be produced. It ought to be obvious that the problem of waste management can perhaps be *most* effectively addressed by preventing its production in the first place, something that could have helped Canada avoid becoming embroiled in the embarrassing so-called "garbage fiasco."¹⁵⁰

4. INTERNATIONAL LAW

4.1. CANADA'S INTERNATIONAL OBLIGATIONS

Globalization, magnified in the context of the COVID-19 pandemic, is impossible to ignore or deny.¹⁵¹ Just as "[t]he prevalence and ease of air travel, patterns of trade, finance, and food production that require the movement of large numbers of people and goods on a daily basis"¹⁵² makes our personal vulnerability to contagious disease inextricably linked to the vulnerability of people living in other nations, the characteristics of pollution coupled with globalization permit it and its impacts to cross borders indiscriminately.¹⁵³ Canada's status as a wealthy nation that produces more waste than many others should mean that it owes the global community a duty to be a leader in environmental protection, owning up to its practical and

¹⁴⁹ See *EPA RSO*, *supra* note 72, s 176(7)(p), (q), (t).

¹⁵⁰ See Randy Shore, "Philippines fiasco: Doctored paperwork obscures origin of garbage shipped to Manila", *The Vancouver Sun* (24 April 2019), online: <vancouver.sun.com/news/local-news/philippines-fiasco-doctored-paperwork-obscures-origin-of-garbage-shipped-to-manila/>.

¹⁵¹ See Jennifer Welsh, "Briefing: International Cooperation and the COVID-10 Pandemic" (1 April 2020), online: *McGill University Max Bell School of Public Policy Briefings* <mcgill.ca/maxbellschool/article/articles-policy-challenges-during-pandemic/international-cooperation-and-covid-19-pandemic> ("[I]t is widely recognized that the increasing economic, political, and cultural integration driven by contemporary processes of globalization has magnified the risk and impact of pandemics for all countries, including Canada").

¹⁵² *Ibid.*

¹⁵³ See Pamela K Anderson et al, "Emerging infectious diseases of plants: pathogen pollution, climate change and agrotechnology drivers" (2004) 19:10 *Trends in Ecology & Evolution* 535; see also A Alonso Aguirre, "Changing Patterns of Emerging Zoonotic Diseases in Wildlife, Domestic Animals, and Humans Linked to Biodiversity Loss and Globalization" (2017) 58:3 *ILAR J* 315.

ethical obligations to consider the impact of its consumptive habits on its neighbours.¹⁵⁴ That wealthy nations have additional ethical responsibilities regarding environmental protection¹⁵⁵ is enshrined in the principle of common but differentiated responsibilities, described further below. These obligations are in addition to the legal obligations it assumed as a signatory to multiple international environmental treaties, discussed below.

Canada has been publicly shamed for failing to live up to such obligations at least once.¹⁵⁶ Despite its vast geography, Canada still sometimes ships its trash overseas; perhaps shockingly, sometimes these shipments include recyclable material that is collected by private companies in British Columbia, a practice that is “not uncommon” according to a spokesperson for Recycle B.C.¹⁵⁷ When one such shipment arrived in Manila, the Philippines, with forged paperwork,¹⁵⁸ a public outcry ensued. Yet, the shipment, consisting of approximately 2,500 tonnes of what was ostensibly recyclable plastic scraps in 103 containers shipped from Vancouver¹⁵⁹ remained untraced and leaking “garbage juice” into the harbour for *four years* culminating, disturbingly, with a threat of war from the Philippines’ president.¹⁶⁰ Canada finally assumed responsibility for its trash in 2019, agreeing to take that garbage back emphasizing that it had “changed its environmental laws to prevent similar situations in the future.”¹⁶¹ However, this action came years too late to avoid staining Canada’s international reputation. BAN Toxics, an environmental group, argues that Canada’s “slow response [...] was doubly offensive because it was a signatory to the *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal*, an international treaty designed to limit the transfer of hazardous waste to developing countries from wealthier ones.”¹⁶² It is thus important to protect Canada’s international reputation from being similarly damaged in the future, particularly since “the dissatisfaction emanating from a perception that the most powerful [countries] have consistently reneged on compacts made during the negotiation of treaties central to the emergent system of global governance [has] contributed to a diminishing association of international law with justice.”¹⁶³

¹⁵⁴ See Antonio Tencati et al, “Prevention Policies Addressing Packaging And Packaging Waste: Some Emerging Trends” (2016) 56 *Waste Management* 35.

¹⁵⁵ See The Times Editorial Board, “Editorial: Wealthy countries are responsible for climate change, but it’s the poor who will suffer most”, *LA Times* (15 September 2019), online: <latimes.com/opinion/editorials/la-ed-climate-change-global-warming-part-2-story.html>; see also Donald A Brown et al, “The Ethical Dimensions of Global Environmental Issues” in Mary Evelyn Tucker & John A Grim, eds, *Religion and Ecology: Can the Climate Change?*, 130:4 (Cambridge: Daedalus: Proceedings of the American Academy of Arts and Sciences, 2001) 59, online: *amacad* <amacad.org/daedalus/religion-and-ecology-can-climate-change>.

¹⁵⁶ See Shore, *supra* note 150.

¹⁵⁷ *Ibid.*

¹⁵⁸ *Ibid.*

¹⁵⁹ *Ibid.*

¹⁶⁰ *Ibid.*

¹⁶¹ Jason Gutierrez, “Canada Agrees to Take Back Trash Sent to Philippines Years Ago”, *The New York Times* (23 May 2019), online: <www.nytimes.com/2019/05/23/world/asia/philippines-canada-trash.html>.

¹⁶² *Ibid.*

¹⁶³ Shirley V Scott, “The Problem of Unequal Treaties in Contemporary International Law: How the Powerful Have Reneged on the Political Compacts within which Five Cornerstone Treaties of Global Governance are Situated” (2008) 4:2 *J Intl L & Intl Relations* 101 at 102.

That is, it is vitally important that countries such as Canada that are positioned to be leaders in environmental protection, and which have publicly committed to such leadership by signing international environmental protection treaties, fulfil their commitments. If not, why should other, less advantaged countries be expected to do so? Again, globalization and Canada's role in the world emphasizes the importance of Canada keeping its international environmental promises. If it and other wealthy nations fail or refuse to do so, international treaties with respect to the environment are revealed to perhaps be entirely meaningless, perhaps not just toothless. Such an outcome threatens the future of our planet, international cooperation and harmony generally, and the repute of international environmental law in particular.

Canada taking responsibility for its trash will not only protect its neighbours and its reputation, but also its populace because of the globalized natural, social, political and legal environments, as well as Canada's privileged status as a relatively wealthy nation.¹⁶⁴ Indeed, the principle of shared but different responsibilities has been a cornerstone of international environmental treaties at least since it was formalized by the 1992 UN Conference on Environment and Development and embodies a deal between developed and developing countries: while all countries in the world need to contribute to mitigate environmental degradation, the developed countries should take the lead, both because of our greater responsibility for environmental degradation and because of our economic capacity to take action.¹⁶⁵

However, Canada's assertion that it has "changed its environmental laws to prevent similar situations in the future"¹⁶⁶ remains inchoately true so long as corporations who manufacture consumer goods are permitted to produce excessive, unnecessary packaging. That is, as we said earlier, the best way to avoid being embarrassed by our trash is by stopping it from being unnecessarily produced in the first place.¹⁶⁷

Canada's international obligations stem not just from moral duty but legally from its status as a signatory to numerous international environmental law treaties.¹⁶⁸ These treaties are generally regarding broad subject areas such as toxic and hazardous substances, pollution, biodiversity, sustainable development, and trade and the environment, among other areas.¹⁶⁹ Some treaties, like the *Basel Convention*, are legally binding, although the enforcement of

¹⁶⁴ See Mark A Drumb, "Poverty, Wealth, and Obligation in International Environmental Law" (2002) 76:4 Tul L Rev 843.

¹⁶⁵ See Scott, *supra* note 163 at 115.

¹⁶⁶ Gutierrez, *supra* note 161.

¹⁶⁷ See Kate McKerlie, Nancy Knight & Beverley Thorpe, "Advancing Extended Producer Responsibility in Canada" (2006) 14 J Cleaner Production 616.

¹⁶⁸ In addition to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, 1989, Canada is a signatory to the North American Agreement on Environmental Cooperation (NAAEC), the Organization for Economic Cooperation and Development Decisions Related to Wastes, the London Protocol on Prevention of Marine Pollution, and the Protocol on Persistent Organic Pollutants, to name a few. For a complete list of treaties and agreements current as of 2018, see "Participation in international environmental agreements and instruments" (27 April 2020), online: *Government of Canada* <canada.ca/en/environment-climate-change/corporate/international-affairs/partnerships-organizations/participation-international-environmental-agreements.html#wb-auto-5>.

¹⁶⁹ See "Public International Law: International Environmental Law Guide" (4 May 2021), online: *The University of Melbourne* <unimelb.libguides.com/internationalaw/environmental>.

international law remains inherently awkward. The absence of treaties specifically regarding excess packaging, like the lack of domestic legislation regarding the same, perhaps shows that this problem has not yet reached the requisite level of urgency in our collective consciousness, or simply is chosen to be ignored. However, the problem *is* pressing and Canada has an opportunity to become a world leader in prohibiting the production of unnecessary garbage in the form of unnecessary packaging. Doing so might help to remove the stain that the “garbage fiasco” placed on Canada’s reputation while simultaneously fulfilling its international obligations.

4.2. EXAMPLES BY OTHER NATIONS

Canada also has the benefit of being able to model other countries who have already implemented stronger legislation preventing the production of unnecessary packaging. For example, businesses in the UK may be classified as “obligated packaging producers” if they produce or use packaging or sell packaged goods.¹⁷⁰ Corporations and organizations that are so classified “must follow rules which help to reduce the amount of packaging produced in the first place, reduce how much packaging waste goes to landfill, and increase the amount of packaging waste [that is] recycled and recovered.”¹⁷¹ They also have a duty of care, the contents of which includes minimizing waste by doing everything reasonably possible to “prevent, reuse, recycle or recover waste (in that order),” safely sorting and storing waste, and “completing a waste transfer note for each load of waste [leaving their facilities].”¹⁷² Notably, however, this legislation contains no reference to limiting the *ratio* of packaging to contents.

Additional guidance may be provided by Nordic countries such as Denmark, Sweden, and Finland, who are commonly seen as global leaders in environmental policy generally and waste management specifically.¹⁷³ However, their actions seem primarily reactive rather than preventative, and, while focusing on the end-of-life stage of consumer goods and packaging is obviously necessary and important, a more complete regime prevents or would prevent such items from being produced in the first place when they are excessive or unnecessary.

Nordic countries, nevertheless, typically follow the lead of the European Union and its applicable directives, including the *Waste Framework Directive* (WFD), the *Packaging and Packaging Waste Directive* (PPWD), the *Landfill Directive* (LFD), and the *Single Use Plastics Draft Directive* (SUPD).¹⁷⁴ Notably, the WFD strongly prioritizes the prevention of waste production and requires Member States to “take measures, as appropriate, to promote the re-use of products”¹⁷⁵ yet declines to specifically prohibit excessive or unnecessary packaging.

While Denmark’s waste prevention strategy stresses the importance of “using packaging

¹⁷⁰ See UK Environmental Agency, “Packaging waste: producer responsibilities” (15 December 2020), online: *Gov.UK* <www.gov.uk/guidance/packaging-producer-responsibilities>.

¹⁷¹ *Ibid.*

¹⁷² UK Environmental Agency, “Dispose of business or commercial waste”, online: *Gov.UK* <www.gov.uk/managing-your-waste-an-overview>.

¹⁷³ See Joe Papineschi et al, “Analysis of Nordic regulatory framework and its effect on waste prevention and recycling in the region” (2019) at 7, online (pdf): *Nordic Council of Ministers* <norden.diva-portal.org/smash/get/diva2:1304371/FULLTEXT01.pdf>.

¹⁷⁴ *Ibid* at 15.

¹⁷⁵ *Ibid* at 16.

with fewer substances of concern that can more easily be reused and recycled”¹⁷⁶ and stresses that “[f]or several years now, various taxes have been in place to prevent waste by limiting raw material consumption, reducing waste volumes, and [promoting] green products which are easier to reuse or recycle,”¹⁷⁷ the document does not prohibit excess packaging or limit the ratio of packaging to product, other than listing “packaging sizes fitted to the content” as a “good idea for how to prevent waste”¹⁷⁸ before later noting that “[e]very Dane consumes 160kg of packaging a year.”¹⁷⁹ The strategy also notes that packaging production reduced following the 2008 financial crisis, before rising again, suggesting that using minimal packaging may actually help corporations to maximize profits.¹⁸⁰ The document’s overall positive, optimistic tone and focus on partnerships and on enabling both consumers and producers to meet their own needs while reducing the pollution created by excess packaging and other sources¹⁸¹ could be a source of guidance for Canadian legislation enacted with similar goals. From our perspective, any such legislation, should it be enacted, must also be mandatory rather than merely permissive to effectively reduce packaging-related pollution.

Additional guidance may be drawn from packaging legislation, VerpackG, that came into effect in Germany on January 1st, 2019.¹⁸² While not appearing to impose limits on packaging/content ratios as this article suggests, VerpackG places responsibility for packaging on those who cause it to enter the consumer economy for the first time; such retailers and manufacturers are required to register with a central agency before placing even a single packaged item in the German market and may face fines up to €200,000 and a prohibition on making sales if it is not complied with.¹⁸³ Registration serves the function of ensuring that packaging producers contribute financially to disposal costs as well as providing transparency to consumers, as the registry is public.¹⁸⁴ The introduction of the new law was coupled with an admonition from the president of Germany’s Federal Environmental Agency (UBA), Maria Krautzberger, that Germans “use far too much packaging [...] [and] must avoid waste, if possible, early in the production phase.”¹⁸⁵ President Krautzberger further “urged industry to ‘make packaging less complicated,’ saying some marketing designs were ‘unnecessary’” and specifically noting that unnecessary packaging, such as tubes of toothpaste contained in cardboard boxes, is

¹⁷⁶ The Danish Government, “Denmark without Waste II: A Waste Prevention Strategy” (2015) at 9, online (pdf): <eng.mst.dk/media/164923/denmark-without-waste-ii_wasteprevention.pdf>.

¹⁷⁷ *Ibid* at 12.

¹⁷⁸ *Ibid* at 13.

¹⁷⁹ *Ibid* at 48.

¹⁸⁰ *Ibid*.

¹⁸¹ *Ibid* at 53.

¹⁸² See Niamh O’Connor, “Germany’s New Packaging Law (VerpackG) Places New Obligations on Online Retailers” (8 April 2019), online: *Etsy Seller Handbook* <etsy.com/ca/seller-handbook/article/germanys-new-packaging-law-verpackg/501392119812>.

¹⁸³ *Ibid*.

¹⁸⁴ See Ionos, “VerpackG: The new German Packaging Act of 2019” (8 April 2019), online: *Digital Guide Ionos* <ionos.com/digitalguide/websites/digital-law/verpackg-a-guide-to-german-packaging-law/>.

¹⁸⁵ “Germany produces record amount of packaging waste”, *DW News* (18 November 2019), online: <dw.com/en/germany-produces-record-amount-of-packaging-waste/a-51293541>.

unacceptable.¹⁸⁶ The fact that people have been complaining about how silly it is to package tubes of toothpaste in cardboard boxes for many years¹⁸⁷ may indicate that more than a simple admonition to industry is necessary; a statute or regulation prohibiting the production or use of such excess packaging might—as we advocate for in the Canadian context—be necessary.

An important distinction between Germany and Canada, which should be considered if following Germany's lead respecting packaging laws, is the availability of recycling facilities in the two countries. As noted above, people in more remote Canadian communities commonly lack access to recycling facilities. This disparity may call into question of exempting the producers of recyclable packaging from any obligations or restrictions associated with its production or disposal, as Germany has. Indeed, this practice may be problematic even in Germany, which has been lauded as the world's "best" recycler but where trash and recyclable material is routinely exported. Unfortunately, Germany's labelling of items as "recycled" once they have been exported has been criticized, as exported recycling commonly winds up in garbage dumps.¹⁸⁸ Canadian federal and provincial/territorial lawmakers would be wise to keep the pitfalls experienced by Germany and other leaders in sustainable practices in mind in designing its own legislation respecting excess packaging, should they eventually be inclined to do so.

5. LEGISLATIVE SOLUTIONS

The scope, scale, and continued growth of the environmental problems caused by the production of unnecessary or excess packaging shows that legislative action to prohibit the production of the same is required. Throughout the course of our research, as noted earlier, we were unable to locate any federal or provincial legislation respecting limits on the quantity or size of packaging relative to a consumer product's quantity or size. Given Canada's privileged status as a wealthy country, its status as a signatory to numerous international environmental treaties, the amount of waste Canadians produce, and the dearth of legislation limiting the amount of packaging that may be produced relative to the size or quantity of the product it contains, federal and provincial/territorial governments should collaborate to limit producers to minimal packaging as a matter of law; in the absence of such a regime, producers should, as a matter of corporate responsibility and best practices, engage in such behaviour particularly as consumers urge them to adopt more sustainable and less environmentally damaging practices.¹⁸⁹ Relying on corporations to voluntarily self-regulate alone has been ineffective,¹⁹⁰ which is why the present authors consider the passing of strong, relevant provincial and federal statutes to ultimately be necessary, if Canada is serious about its commitment to a healthy environment

¹⁸⁶ *Ibid.*

¹⁸⁷ See Michael McCarthy, "Waste basket: Minister backs campaign to cut packaging", *The Independent* (23 January 2007), online: <independent.co.uk/environment/waste-basket-minister-backs-campaign-to-cut-packaging-433330.html>.

¹⁸⁸ *Ibid.*

¹⁸⁹ See Anh Thu Nguyen et al, "A Consumer Definition of Eco-Friendly Packaging" (2020) 252 *J Cleaner Production* 1.

¹⁹⁰ See Amit Narang, "Corporate self-regulation is failing", *The Hill* (28 March 2019), online: <thehill.com/blogs/congress-blog/the-administration/436328-corporate-self-regulation-is-failing>.

and stemming climate change.¹⁹¹

For legislation to effectively address the problems created by the production and use of excess packaging, it should comply with the principle of cooperative federalism (that is, it must represent a joint effort among the federal and provincial/territorial governments. It should be directed at the actions of those primarily responsible for the production and use of excess packaging: the corporate entities that produce and use that packaging, and not the final consumer, who has far less control over and therefore responsibility for the creation of packaging.¹⁹² It must be sufficiently robust and contain strong enough enforcement mechanisms to fulfil its ideal function of deterring and denouncing the production and use of such packaging. The body or bodies responsible for enforcement must be backed by sufficient funding to, again, permit legislation to fulfil that function. And, it must be carefully tailored to explicitly prohibit the creation or use of excess packaging while remaining sensitive to the need to avoid unintentionally creating new problems or regulatory gaps or exacerbating the environmental harms that it seeks to redress.

Existing environmental legislation, as canvassed above, provides insight into how the federal, provincial, territorial and municipal governments might divide responsibilities for legislation with respect to excess packaging. Practical concerns produce a similar conclusion. That is, the federal government should take a leadership role in terms of both strength of legislation and the pace with which it is created. That legislation should be aimed at regulating those bodies implicated in the creation and use of packaging and who fall under federal jurisdiction as well as packaging-related concerns that transcend borders (for example, perhaps prohibiting the transportation of excess packaging overseas in order to ensure compliance with Canada's international ethical and legal obligations). Provinces/ territories should follow the lead of the federal government, focusing on their responsibility (shared with municipalities) for solid waste management. Legislation should follow recommendations made previously by federal and provincial/territorial bodies such as the EPR¹⁹³ and the Strategy.¹⁹⁴ Lawmakers engaged in regulatory reform should consider how amendments to current environmental statutes, such as the *EPA*, could be effective.

To practically and effectively eliminate the problems posed by excessive or unnecessary packaging, new legislation must be directed at those who are primarily responsible for (that is, who primarily control) its creation and use: corporations who produce packaging or other consumer goods, and whose representatives are responsible for making environmentally damaging choices.¹⁹⁵ Industry and corporate representatives ought necessarily to participate in the development of such legislation, because legislation is likely to be more effective and more

¹⁹¹ See *References re GGPPA*, *supra* note 90 (“[c]limate change is real. It is caused by greenhouse gas emissions resulting from human activities, and it poses a grave threat to humanity’s future. The only way to address the threat of climate change is to reduce greenhouse gas emissions” at para 2).

¹⁹² See Carsten Herbes, Christoph Beuthner & Iris Ramme, “How Green Is Your Packaging—A Comparative International Study of Cues Consumers Use to Recognize Environmentally Friendly Packaging” (2020) 44:3 *Intl J Consumer Studies* 258.

¹⁹³ See Extended Producer Responsibility PN 1499, *supra* note 5 at i.

¹⁹⁴ See Ontario Circular Economy, *supra* note 37.

¹⁹⁵ See Gyöngyi Kovács, “Corporate Environmental Responsibility in the Supply Chain” (2008) 16:15 *J Cleaner Production* 1571.

readily complied with if those who it is intended to regulate have a say in its construction.¹⁹⁶ It is similarly more likely to be effective if it is at least partly incentive-based.¹⁹⁷ Such inclusion supports our assertion that legislation that effectively addresses the problems posed by the creation and use of unnecessary or excessive packaging should be created in partnership with industry. This in turn may have the by-product of decreasing the various effects that incessant marketing and limitless consumerism have upon Canadians themselves and the environment.

Additionally, regulatory carve-outs with respect to packaging that is made from recycled or non-durable materials (that is, legislation should perhaps contain some exemptions or lower fines for corporations using or producing packaging made from such materials) should be supported. However, it is important to understand that creating and transporting non-durable or recyclable packaging materials still has a significant environmental cost, even if those materials are made from natural resources which are transformed using chemicals and energy, and then transported with the resultant release of emissions.¹⁹⁸ In addition, as argued above, the fact that packaging is made from recyclable materials does not guarantee that it will, in fact, be recycled. Therefore, the envisioned or ideal regime ultimately should incentivize corporations to use non-durable, biodegradable or recyclable materials *and* less packaging, rather than *simply less* packaging.

Generally speaking, industry participation should not be permitted to undermine the legislation's purpose. If industry and corporate social responsibility alone could be relied on to act in an environmentally responsible manner, there would be no need for this legislation in the first place as the problem of excess or unnecessary packaging would likely not exist. Legislation, therefore, that merely represents "lip service," that lacks sufficiently robust enforcement mechanisms, that is enforced by an underfunded agency, or that ultimately succumbs to regulatory capture, will only conceal the problem's continued existence and ensure its enduring and persistent existence.¹⁹⁹ New packaging legislation will only be effective if those responsible for enforcing it are adequately and legally equipped to do so: the responsible body must be adequately staffed and financed, and must be permitted to sanction those who violate any such laws.

As the proposed legislation would largely affect corporations with notoriously "deep pockets" and even ordinary ones, it makes sense for sanctions to include fines, perhaps on a spectrum or hierarchy. Legal systems have been criticized for fining corporations in such small amounts that, rather than acting as a deterrent, the fines functioned as a price for non-compliance, one that powerful corporations might decide is well worth paying for continued non-compliance simply as a cost of doing business. For this reason, the authors suggest that any fines be rationally linked to the size or profitability of the corporation to be sanctioned, perhaps as a function of their previous year's reported profits or some other similar metric.

¹⁹⁶ See Jingyan Fu & Yanyun Geng, "Public participation, regulatory compliance and green development in China based on provincial panel data" (2019) 230 J Cleaner Production 1344.

¹⁹⁷ See Robert C Anderson, "Incentive-Based Policies for Environmental Management in Developing Countries" (August 2002), online (pdf): [media.rff.org <media.rff.org/documents/RFF-IB-02-07.pdf>](http://media.rff.org/documents/RFF-IB-02-07.pdf).

¹⁹⁸ See Erik Svanes et al, "Sustainable Packaging Design: A Holistic Methodology For Packaging Design" (2010) 23:3 Packaging Technology & Science 161.

¹⁹⁹ See Jason MacLean, "Striking at the Root Problem of Canadian Environmental Law: Identifying and Escaping Regulatory Capture" (2016) 29 J Environmental L & Practice 111.

Two additional ways to ensure that fines are sufficiently robust to ensure compliance, which we recommend incorporating into the proposed legislation, are to have their quantum increase with repeated violations and to have them apply *per violation*. This would also be rationally connected to the nature of the harm caused by excessive packaging, which increases with the number of items created, sold, or transported. Ultimately, such violations must incur financial penalties that constitute effective deterrents; if associated fines are merely a “slap on the wrist” they risk becoming merely another cost of doing business, or a *fee* for infringement rather than a punishment or disincentive. Finally, there should be a finite number of violations that a corporation is permitted to commit, before suffering a permanent and severe penalty.²⁰⁰

Any solution implemented must also be mindful of the important functions that packaging plays in supply chains. Dangerous products must be kept out of the hands of children, for example, and fragile goods must be kept intact. Frequently, these goals are statutorily mandated, and any legislation designed to prohibit the production of excess packaging must be conscious of its potential to conflict with other, existing legislation implemented to protect customers. Similarly, it must avoid placing producers in the unenviable position of choosing which statutory requirements to comply with and which to contravene. This dilemma has been exemplified by medical cannabis users who have complained about the excessive packaging in which cannabis is shipped.²⁰¹ While limiting the waste produced by the cannabis (or any particularly) industry is important, the regulation of packaging in the food services and food production industries is of primary importance, given the sheer volume of goods (and packaging) that these industries produce and their ubiquity in our lives. Put differently, not everyone consumes cannabis, but everyone eats.

For this reason, legislation respecting packaging must be carefully tailored and must include a meticulously crafted definition of “excessive” and “unnecessary.” The authors suggest that an appropriate definition could include any packaging that is not required for the safe transport of its contents or for the protection of consumers. This could include a maximum packaging-to-contents ratios, perhaps specifically tailored to particular types or categories of products. These ratios might be best determined with input from industry partners, including those who produce goods and packaging as well as those who transport and sell products to consumers.

Legislating a maximum packaging-to-contents ratio is not a panacea to pollution, nor do we claim it to be. While this article has shown that the lack of such legislation represents an important gap in governments’ response to the environmental damage caused by environmental pollution and degradation, it must be accompanied by other measures that address other, similar gaps, such as the lack of a legislated minimum recycled contents for plastics.²⁰² This is

²⁰⁰ See *Canadian Plastic Bag Association v Victoria (City of)*, 2019 BCCA 254; *R v Blackwell*, 2012 BCPC 366; *Alpha Manufacturing Inc et al v HMTQ*, 2005 BCSC 1644; *Ontario (Ministry of the Environment) v 349977 Ontario Ltd*, 2012 ONCJ 170; *R v Fibreco Pulp Inc*, 1993 Carswell BC 586, 1993 CanLII 225 (BC SC).

²⁰¹ See The Canadian Press, “Producers blame federal guidelines as customers raise concerns over ‘excessive’ cannabis packaging”, *Global News* (22 October 2018), online: <globalnews.ca/news/4581623/excessive-cannabis-packaging/>.

²⁰² For a detailed description of a California law mandating minimum recycled contents for plastics, see Mitzi Clark & Natalie E Rainer, “The California Rigid Plastic Packaging Container Law” (27 May 2016), online: packaginglaw.com <packaginglaw.com/special-focus/california-rigid-plastic-packaging-container-law>.

important given the problem posed by wealthy nations exporting their recyclable plastics to less wealthy nations only to discover that those plastics were dumped rather than recycled,²⁰³ and because of how cheap it remains to manufacture non-recycled plastics.²⁰⁴ Legislating closed-loop supply chains, a component of circular economies that involve returnable transport items (RTIs), could also help prevent the production of unnecessary packaging and promote recycling.²⁰⁵

6. CONCLUSION

The problems posed by excess and unnecessary packaging will continue to proliferate at least as long as such material continues to be produced and used. In fact, it will persist long past that point given the durable materials from which it is commonly made. While some legislative efforts may have modestly reduced the resulting negative impacts, which include the creation of massive garbage dumps on land and in the sea, increased emissions, and associated health hazards, the problem continues to grow despite extant biodegradable packaging and recycling efforts. This reality indicates the need for a new regulatory approach.

The most effective and efficient regulatory approaches prevent problems from occurring. Therefore, preventing excessive packaging from being created in the first place is the best approach to solving the environmental problems dealt with here. Because packaging is created and (primarily) used by those who produce packaging and consumer goods and those who sell those goods to the final consumer, the proposed legislation should be aimed at regulating corporate producers and users rather than final consumers who, after all, have little say in or control over the packaging containing the goods that they need or desire to consume.

As environmental problems have no innate concern for jurisdictional lines, any effective legislation ought to embrace the notion of cooperative federalism and require collaboration between federal, provincial/territorial, and even municipal governments. An important component of the federal government's regulatory responsibility should be ensuring compliance with Canada's international legal and ethical obligations. Other existing environmental legislation and government publications shed light on what the responsibilities of each level of government should be.

To act as an effective deterrent, any proposed legislation must be carefully tailored to avoid conflicts with other existing laws or with the necessary purposes of packaging (safe transport, consumer protection, and marketing). Limited legislative carve-outs (that is, lower fines but not a complete exemption) should apply to those corporations using non-durable or recycled packaging. Compliance may also be encouraged by ensuring that regulation is at least partly incentive-based, and by ensuring that industry partners have some say into the creation of the legislation that will affect them. But, as pure self-regulation has proven ineffective, packaging legislation must be backed by powerful financial sanctions which should ideally be rationally connected to the wealth or profitability of the offending entity, and a regulatory body that is adequately staffed and funded. Enacting legislation in line with the above recommendations will aid Canada in mending its tarnished international reputation with respect to the

²⁰³ See *supra* note 193.

²⁰⁴ See Carriere & Horn, *supra* note 39 at 1.

²⁰⁵ See Christopher H Glock, "Decision support models for managing returnable transport items in supply chains: A systemic literature review" (2017) 183 Intl J Production Economics 561 at 561.

environment, a tangential but still important goal that pales in the face of other promised benefits: a more sustainable, safer, and healthier future for Canada, the environment, and the world's inhabitants, both human and non-human.

