



Doing away with plastic shopping bags: international patterns of norm emergence and policy implementation

Jennifer Clapp & Linda Swanston

To cite this article: Jennifer Clapp & Linda Swanston (2009) Doing away with plastic shopping bags: international patterns of norm emergence and policy implementation, *Environmental Politics*, 18:3, 315-332, DOI: [10.1080/09644010902823717](https://doi.org/10.1080/09644010902823717)

To link to this article: <https://doi.org/10.1080/09644010902823717>



Published online: 24 Sep 2009.



Submit your article to this journal [↗](#)



Article views: 45858



View related articles [↗](#)



Citing articles: 68 View citing articles [↗](#)

Doing away with plastic shopping bags: international patterns of norm emergence and policy implementation

Jennifer Clapp^{a*} and Linda Swanston^b

^a*Faculty of Environment, University of Waterloo and Centre for International Governance Innovation, Waterloo, Canada;* ^b*Centre for International Governance Innovation, Waterloo, Canada*

The rapid and widespread emergence of an anti-plastic shopping bag norm and associated regulatory policies around the world in recent years forces a rethinking of current understandings of norm dynamics and policy implementation. The patterns of this movement are explored and characterised as a South to North, non-networked and multi-scalar series of events that together represent a globally significant emergence of a new environmental norm. It also shows that differences in policy outcomes as a response to this norm in different countries and at different jurisdictional levels are in many ways linked to the influence of material interests in the interpretation of the norm into policy. These variations in domestic norm interpretation in turn influence international norm dynamics.

Keywords: plastic shopping bags; international environmental norms; material interests; norm dynamics; policy implementation

Over the past decade, a remarkable number of local, sub-national and national governments have passed legislation to ban or severely restrict the use of plastic shopping bags. Legislation against plastic bags has occurred at a number of jurisdictional levels, from villages and cities, to states and entire countries. Together these various regulatory movements reflect a significant shift in the international norms associated with disposable plastic bags. Plastic shopping bags are increasingly seen as environmental hazards that threaten human and animal welfare, rather than benign modern conveniences. The emergence around the world of an anti-plastic bag norm has been rapid and widespread. Although the norm has been adopted widely, the way in which it has been translated into policy has varied.

We examine the pattern of international adoption of an anti-plastic bag norm, and seek to explain how and why its interpretation into legislation to

*Corresponding author. Email: jclapp@uwaterloo.ca

curb plastic shopping bag use has differed in different parts of the world. By 'norms' we mean ideas and beliefs about what behaviour is appropriate (Bernstein 2001, p. 29). Constructivist international relations literature has focused a great deal of attention on the dynamics of norm adoption around the world with respect to a number of issues, including environmental ones. Such an approach helps to expand our understanding of the normative underpinnings of environmental policy in a global context. But, as we argue, the plastic bag case forces us to rethink some common assumptions about norm dynamics and their translation into policy in an international context.

First, the way in which the norm emerged around the world has been counter to broad assumptions in the literature. The norm dynamics literature notes that new norms tend to be diffused amongst states following a pattern from North to South, and that this diffusion typically takes place via the efforts of norm entrepreneurs associated with an organised transnational social movement or international institutions (Finnemore and Sikkink 1998, Keck and Sikkink 1998). But in the case of plastic shopping bags, the first communities to embrace the anti-plastic bag norm were in the global South, with those in the global North only doing so much more recently. This case is also different in that the worldwide emergence of the norm did not involve conventional 'norm entrepreneurs' at the international level, nor were the actors involved networked in its early stages. It originated, rather, as an ad hoc series of bottom-up events occurring simultaneously at different jurisdictional levels around the world.

The way in which the emergence of the anti-plastic bag norm has been interpreted into policy also raises new insights about the dynamics between norm adoption and policy implementation. The international norm dynamics literature assumes that an international norm has been adopted when it is codified by states in international agreements (both hard and soft), practices, and institutions (Bernstein 2001, p. 30). In the case of plastic bags, however, there is no international level treaty or institution to govern the adoption of the norm. Rather, it has been taken up at a combination of national and subnational levels around the world, and the policy instruments chosen to express the norm have varied widely from bans to taxes to voluntary measures. We argue that industry actors have played a prominent role in the interpretation of the anti-plastic bag norm into policy in different jurisdictions. The relative weight of the various types of power held by these actors, including their structural presence in the economy, their instrumental power to lobby or litigate, and the traction of their discursive strategies in specific contexts, has enormous relevance for their ability to influence policy outcomes on this issue at both national and subnational levels.

In making these arguments, we draw on examples of the emergence of an anti-plastic bag norm as well as the political dynamics surrounding actual and proposed plastic bag legislation around the world. In section one, we outline

the history of plastic shopping bags and the reasons for the emergence of an anti-plastic bag norm. Section two gives an overview of the initiatives around the world to eliminate or restrict the use of plastic bags, highlighting the localised motivations for the norm and the South to North pattern of norm emergence and diffusion. The third section then examines the role of industry actors in the interpretation of the norm into policy, and shows that the relative weights of structural, instrumental and discursive power on the part of the plastics industry are important to consider in understanding differing policy outcomes – and at different jurisdictional levels – linked to the same environmental norm.

Plastic shopping bags in context: production, consumption and environmental concerns

Initially developed and promoted by the US oil and gas industry, plastic shopping bags were not immediately adopted by consumers. When first introduced in the US in the 1970s, the ubiquitous phrase ‘paper or plastic?’ indicates the struggle plastic bag manufacturers initially faced in shifting attitudes towards disposable plastic bags. Only in 1977 did American supermarkets start to consistently offer plastic carryout bags to shoppers. Western Europe began to offer them consistently in the 1980s, and developing countries in the 1990s. Today between 500 billion and 1.5 trillion plastic shopping bags are used each year worldwide (Spokas 2007). Estimates suggest that 8 billion plastic shopping bags are used per annum in the United Kingdom, 4.3 billion in Australia, 9.8 billion in Hong Kong, 3.3 billion in Bangladesh, 100 billion in the United States and 300 billion to 1 trillion in China (Environment Australia 2002, Dumas 2007, ABC 2008).

The plastics industry contends that these numbers, though large, represent only a small fraction of the waste stream and therefore do not warrant attention or concern, particularly because they can be recycled (ACC 2007). The Worldwatch Institute (2004, p. 25), however, points out that globally only a tiny percentage of plastic bags are successfully diverted and those that are not recycled cause environmental problems. In the US, fewer than 5% are recycled, with the remainder ending up in landfill or unintentionally released into the environment (USEPA 2006). Within the waste stream, plastics are significantly less valuable than textiles and metals, with plastic film being one of the least valuable recyclables. North American recyclers have low demand for post-consumer plastic bags from municipal recycling programmes, due to high rates of contamination (Stewardship Ontario 2007). In developing countries, there is a near complete absence of established solid waste management infrastructure and recycling facilities.

Plastic bags are also seen to create disproportionate environmental challenges because of their physical and chemical characteristics. Plastic bags are made from petroleum products, and thus have implications for fossil fuel supplies as well as climate change. In the US alone, according to some estimates,

12 million barrels of oil are required to produce the 100 billion plastic bags used annually (San Francisco Department of Environment 2004). Although single-use plastic bags have some advantages in embedded energy lifecycle analysis when compared to paper bags, research is clear that they are not the best option (Environment Australia 2002).

Beyond energy and climate impacts, the persistence of plastic bags in the environment has been a particular problem. Plastic bags can take up to 1000 years to break down (UNEP 2005b), creating problems on a number of fronts. First, they contribute to unsightly litter in public spaces, exacerbated by their light weight and parachute-shaped design which makes them travel easily through the air and in waterways. Second, they pose a public health and safety threat because they can act as breeding grounds for malaria-carrying mosquitoes and can clog sewers and storm-water drains. Third, they pose threats to wildlife that may become entangled in them or inadvertently eat them. Finally, when they do ultimately break down, they do not biodegrade; instead they *photodegrade* – meaning that they break down into smaller and smaller pieces. These small pieces can be consumed by wildlife and their long-term effects on soil and water quality are not yet clear. Recent research suggests that plastics can attract and absorb persistent organic pollutants (Rios *et al.* 2007).

Dynamics of the anti-plastic bag norm

Because of the multiple problems posed by plastic shopping bags, attitudes towards them have turned negative around the world and a number of governments have taken action to restrict their use. There are two important ways in which the case of plastic bags differs from typical norm dynamics as discussed in the international relations literature. First is the South to North pattern of the norm's emergence. The first jurisdictions where anti-plastic bag norms emerged and regulatory action was taken were in the global South in the late 1990s and early 2000s. Northern industrialised countries saw attitudes shift only in more recent years, often with less stringent accompanying regulation. This South first, North second pattern of norm adoption is the opposite of the patterns typically seen with international norms (Keck and Sikkink 1998). With regulation on hazardous waste, air pollution, and endangered species, for example, a North first, South second pattern has been typical (e.g. Clapp 2001, Epstein 2006).

The second major difference in this case is simultaneous norm emergence around the world without a networked international 'movement' led by transnational norm entrepreneurs, as has been typical on other issues (Keck and Sikkink 1998). The emergence of the norm and its interpretation into policy have largely been based on local and regionally specific concerns in uncoordinated, ad hoc bottom-up initiatives, while the policy instruments chosen to express the norm have differed between jurisdictions. Yet despite the lack of an internationally networked campaign against plastic bags, this norm

has rapidly emerged around the world, especially since 2005. This most recent activity can be seen as representing the cusp of a 'cascade' of norm adoption where multiple countries adopt a new norm in rapid succession. However, while Finnemore and Sikkink (1998, p. 902) note that in a 'cascade' new norms are adopted without domestic pressure to do so, motivations for regulation of plastic bags have remained localised and regional.

Why did anti-plastic bag norms first emerge in the global South? There are a number of locally specific reasons for anti-plastic bag sentiment that are distinct to the developing world and which have direct consequences for human well-being. These impacts are exacerbated by the fact that municipal waste collection and recycling are much less established in the global South, and although there is a thriving business in scavenging in many developing countries, plastic bags are often not profitable to collect and recycle (Narayan 2001, p. 30). According to Finnemore and Sikkink (1998, p. 27), new norms are more likely to be adopted in cases where the chain between cause and effect is short and clear, and where the consequences result in bodily harm or lack of equality of opportunity. These conditions hold most closely in the Southern jurisdictions where anti-plastic shopping bag sentiments first emerged.

Early emergence of the norm in the South

A strong shift in attitude against plastic bags, as well as adoption of accompanying legislation, first emerged in South Asia. Early campaigns against plastic shopping bags began in Bangladesh in the early 1990s, led by local environmental NGOs and later taken up by the Ministry of the Environment (Reazuddin 2006). Although initially focused on the capital city, Dhaka, the campaign went national in response to strong public support. At first it proved difficult to legislate a full ban, but the issue was pushed up the agenda in 1998 after plastic bags were blamed for blocking drains causing floodwaters to persist for two months. Although the initial plan was to ban ultra-thin bags, in the end Bangladesh adopted a ban on the use and manufacture of all plastic shopping bags.

In India anti-plastic bag sentiment took hold in the 1990s and laws were passed in various states and cities to restrict their use (Edwards and Kellett 2000). A key rationale specific to India is that plastic bags pose a health threat to free-roaming sacred cows. Cows eat discarded bags along with other garbage in the streets, and starve to death because bags clog their digestive systems (Krulwich 2000). Plastic bags have also been implicated as a key factor in landslides and floods in a number of states, in addition to being an eyesore which harms the tourist industry, particularly in the Himalayas (Down to Earth 2000). The states of Sikkim, Maharashtra, Himachal Pradesh and the Himalayan regions of Ladakh, Haryana, Jammu and Kashmir as well as Delhi and Bombay all enacted bans on plastic bag distribution, use, and discard in the late 1990s and early 2000s (Down to Earth 2000, Chauhan 2003). Some jurisdictions banned only ultra-thin bags, less than 20 or 25 microns (on the grounds that thicker plastic bags would be reused and not discarded), but others banned them all outright.

Taiwan also saw shifts in norms and policy around plastic bags in the late 1990s and early 2000s, again under locally specific circumstances. Rapid economic growth in the 1980s dovetailed with the introduction of plastic packaging in the fast food and retail sectors leading to an increase in plastic waste. At this time garbage picking for recyclables became an unattractive occupation, resulting in plastic waste going to landfill or incineration, rather than being recycled. Having already fought hard to reduce air pollution, the release of toxins from incineration of plastic waste was a particular worry. Following years of debate between environmental groups, industry and the government, Taiwan's Environmental Protection Agency began a phased-in ban on disposable plastics over 2002–03 (McLaughlin 2004). The ban on plastic bags was partially reversed in 2006, allowing the use of plastic bags for packaging in the fast food sector because of food safety concerns (Shan 2006).

In South Africa plastic bags were highlighted as a problem in a 2000 study of waste management practices leading the government in 2001 to introduce the idea of banning them (Hasson *et al.* 2007). Plastic bags were seen as a problem because they were an unsightly element of litter harming the country's image for tourists, and were seen as a hazard to animals. Following broad debate and consultation with various stakeholders, a Plastic Bag Agreement was reached in 2002 which called for a ban on thin plastic bags (less than 30 microns) as well as a levy on the use of thicker bags. The levy on plastic bags is imposed at the point of purchase by retailers, who in turn charge customers for the bags (later amended to large supermarkets only), and give them the choice not to take them (Government of South Africa 2004).

This early wave of plastic bag policies in a number of countries in the developing world was based primarily on concerns regarding human health and livelihoods, and signalled that the idea of plastic bags as a menace to be discouraged had taken hold. Following this initial emergence of the anti-plastic bag norm, several rich industrialised countries began to accept the idea, though the policies adopted were in many cases less stringent.

Anti-plastic bag sentiment emerges in the industrialised world

Plastic bags constitute a high percentage of the pollution found in Ireland's coastal areas, hampering the country's ability to promote its 'green' image and scenic beauty (Department of the Environment, Heritage and Local Government 2007). In response to growing concerns, Ireland implemented legislation to tax plastic shopping bags in 2002, and has had very strong support from the public, signalling that the anti-plastic bag norm had taken hold. The 'plastax', as it is commonly known, initially set at €0.15 and later raised to €0.22, led to a 90–95% reduction in plastic shopping bag use in the country in a very short period of time (Convery *et al.* 2007).

In Australia, concern focused mainly on litter, particularly along coastlines, and the hazards that plastic bags pose for marine animals (Environment Australia 2002). The government of Australia adopted a voluntary reduction

programme and undertook a major study on the issue. At the same time, a number of states and municipalities took their own initiatives to ban plastic bags. The town of Coles Bay in Tasmania banned plastic shopping bags in 2003 (Wallace 2006). In the state of Victoria 'free plastic bags' will be banned from 2009 and a 10 cent fee will be charged retailers who wish to distribute them. South Australia passed legislation to ban them from May 2009 (Groves 2008). In early 2008, the Australian government announced that it was seeking a complete phase-out by the end of the year via either a ban or a tax (Sydney Morning Herald 2008).

The cusp of a cascade?

Recent years have seen a growing emergence of the anti-plastic bag norm and associated policies in both North and South that could be interpreted as the cusp of a 'cascade' of norm adoption. Initially the norm emerged primarily for locally specific reasons and was largely a bottom-up simultaneous occurrence. By 2005 the promotion of the norm became more international: it was promoted in Africa by the United Nations Environment Programme (UNEP) and by local movements via the internet, which had the effect of reaching, and probably influencing, other communities around the world. But despite this internationalisation, campaigns to change behaviour as well as legislation regarding plastic shopping bags remained largely localised.

In sub-Saharan Africa plastic bags are frequently used as 'toilets' and then strewn (known as 'flying toilets'), acting as a means by which disease can spread. Also, when embedded in soil, they can hold liquid, creating potential breeding grounds for malaria-carrying mosquitoes. In 2005 UNEP released a report on Kenya's plastic bag problem which recommended a ban on thin bags and a levy on thicker ones, with the idea that this model could be used in other African and developing countries (UNEP 2005b). Following prompting by Wangari Maathai, internationally renowned Kenyan environmental activist and politician who won the 2004 Nobel Peace Prize, the report was written in an effort to find a solution to the plastic bag problem in Africa (UNEP 2005a). In 2005, Rwanda imposed a ban on the use and import of plastic bags less than 100 microns thick, and Tanzania imposed a total ban on the bags in 2006. In 2007 Uganda and Kenya brought in legislation to ban thin bags and tax thicker ones (BBC 2007). Ghana, Ethiopia and Lesotho are reportedly among other African countries also considering legislation (Reuters 2007).

The anti-plastic bag norm also spread to other parts of the industrialised world, including North America and the United Kingdom in late 2006 and 2007. Websites highlighting the evils of plastic bags began to appear, and reported on legislation adopted in other parts of the world as models that should be followed. It became fashionable to resist the plastic bag at supermarket checkouts, and designer reusable bags became highly sought after, fetching many times their original price in online auctions and in some cases causing near riots amongst those lining up to purchase them (Herald Sun

2007). The diffusion of the norm linked up with ideas around 'green consumption' that were also taking hold at the same time (Seyfang 2005).

San Francisco became the first US city to impose a ban on plastic shopping bags in 2007, citing concern over not just litter and danger to sea animals, but also greenhouse gas emissions associated with such petroleum-based products. Other US communities, including New Haven, CT, Oakland, CA, Los Angeles, New York City, and the state of New Jersey have or are considering similar legislation. In early 2007 several small Canadian towns banned the bags, while the province of Quebec is considering a tax (Harrold 2007). In Ontario, the provincial government opted to promote a voluntary approach starting in 2007, working with retailers and the plastics industry to cut use by 50% in five years; provincially owned liquor stores ceased to distribute plastic bags in 2008 (Ontario Ministry of the Environment 2007, Ontario Ministry of Energy and Infrastructure 2008). In late 2008 the city of Toronto passed legislation requiring retailers to charge customers 5 cents per plastic bag.

By 2007, some 80 UK towns and villages had adopted or were in the process of adopting 'voluntary' retailer bans on plastic shopping bags (Benjamin 2007). Rebecca Hosking, a wildlife film-maker, first championed the idea in the UK. After filming the impacts of plastic waste on marine life in the Pacific, she returned to her small village of Modbury in Devon and previewed her film to local shopkeepers, inspiring support for a voluntary ban on handing out plastic shopping bags (Barkham 2007). In February 2008 Prime Minister Gordon Brown suggested that the national government would consider stringent legislation if retailers did not substantially cut their use of the bags (Times Online 2008). The following month, the *Daily Mail* newspaper launched a major campaign to 'banish the bag', signalling the widespread appeal of the idea of plastic bags as inherently bad (Daily Mail 2008).

Action on plastic bag legislation has also been initiated in Hong Kong and China. In 2007 Hong Kong began to take measures to impose a tax on plastic bags, while China banned them outright in early 2008 (International Herald Tribune 2008). In its background preparation for bringing in the ban, China consulted with Bangladesh, indicating that networking was emerging not necessarily amongst civil society campaigns but amongst governments (Vidal and Stanway 2008). In 2008 other countries announcing upcoming taxes and bans on plastic shopping bags included the Philippines, Israel, Italy, and New Zealand.

Although at the cusp of the 'cascade' there were local and regional 'norm entrepreneurs' and peripheral involvement of the UNEP (primarily in sub-Saharan Africa), the worldwide emergence of the norm is best characterised as the result of a non-networked, locally specific set of initiatives and campaigns, rather than a globally coordinated one. No one environmental group or transnational norm entrepreneur has taken up this cause. The activity around plastic bags is occurring at multiple jurisdictional levels, from national to state to municipal, and is driven by locally specific concerns.

Explaining differences in policy responses: competing ideas and industry influence

Although the anti-plastic bag norm has emerged in many jurisdictions around the world, the interpretation of that norm into policy has differed considerably. While some jurisdictions opted for an outright ban, limited bans (based on bag thickness, size of retail operation, or purpose of use), taxes and voluntary measures were adopted in others. The level of government where action is taken has also differed – from municipalities, to provinces to nation-states. There is no neat North–South policy implementation divide with respect to instrument or level of government. The variety of policy responses demonstrates a non-linear relationship between norm emergence and implementation into policy. In cases where there is no international treaty to codify a new norm, a variety of policy responses might be expected. But what explains why certain jurisdictions choose one policy instrument over another in response to the same norm? Taking a closer look at the contexts in which anti-plastic bag policies have been adopted, it appears that industry actors have played an important role in determining how the norm is translated into policy, which in turn has implications for the further evolution of the norm.

The literature on norm dynamics fully examines neither the issue of differing policy outcomes at multiple jurisdictional levels in response to the same norm, nor the role of material interests in the interpretation and evolution of norms. There is an assumption in the international norm dynamics literature that a norm is adopted when it is codified in international law or other international institutional arrangements. As the plastic bags case shows, new environmental norms can be adopted around the world even in the absence of an international legal or institutional mechanism codifying it. Several studies have sought to explain environmental ‘policy convergence’ across states in the absence of international agreement (Busch *et al.* 2005) but have looked mainly at the adoption of the same policy around the world, rather than cases where the same norm led to different policies.

Because it focuses primarily on ideational explanations for changes in international behaviour, the constructivist literature has paid relatively little attention to the role of material interests such as private industry in the interpretation of norms into policy at the domestic level, and how these varied domestic policies feed back into the further development of international norms. Some recent work, however, has noted that business actors are driven as much by ideas as by material interests, as was seen in the case of intellectual property rights norms and policy (Sell and Prakash 2004). Similar dynamics are present with respect to norms and policy surrounding plastic bags.

In examining the role of industry actors in interpreting new norms into policy, it is useful to take a closer look at the types of power industry can wield in the policy-making arena. Fuchs (2005) has characterised business actor power into three main types: structural, instrumental and discursive. The relative strength of the plastics industry’s power to influence policy along these three dimensions in different parts of the world and at different jurisdictional

levels helps to explain the differing policy outcomes regarding plastic bags. The plastics industry's structural power in the form of job provision and its contribution to the overall manufacturing economy appear to be important factors weighed by governments in making policy decisions. How well equipped industry is to lobby effectively and to use legal threats against proposed legislation determines its degree of instrumental power in a particular jurisdiction. Also central to the plastics industry's influence over the regulatory process is the effectiveness of its efforts to capture the environmental discourse as it relates to plastic bags. Whether the discourse promoted by industry in favour of plastic bags, typically based on existing norms of recycling and energy efficiency, wields influence depends on whether these norms are widely embedded in society, and the strength of competing norms such as health, safety, and anti-littering.

A comparison of the interpretation of the anti-plastic bag norm into policy in two very different jurisdictions – Bangladesh and the United States – illustrates the role of the plastics industry's influence on policy outcomes. In Bangladesh, where industry's structural, instrumental and discursive power were all weak, we saw strong legislation at the national level to ban plastic bags outright. In the US, where the structural power of the plastics industry is strong, policy initiatives aimed at plastic bags have emerged primarily at municipal level. Here industry has, with varying degrees of success, employed both instrumental and discursive strategies to oppose local bag bans. Where it threatens litigation and where its discursive strategies have traction, it has been most able to weaken regulatory responses to the emergent anti-plastic bag norm. The ability of industry to derail the domestic regulatory process through the application of various dimensions of power by extension influences international norm dynamics. The arrival at an international 'tipping point' of norm adoption is influenced by material interests' ability to shape domestic policy implementation. Understanding industry's application of power in relation to plastic bag legislation thus provides insight not only into various domestic policy contexts, but also patterns of international norm dynamics.

Weak plastics industry and a total plastic bag ban in Bangladesh

The anti-plastic bag campaign began in Bangladesh in the early 1990s; by 2002 one of the most restrictive pieces of legislation globally had been enacted banning the production, sale and use of polyethylene bags, first in the capital Dhaka and later nationwide. The plastics industry's strategies and influence over policy regarding plastic bags has not been particularly strong in the structural, instrumental or discursive sense, and as a result the policy adopted was stringent and enacted at the national level.

The plastics industry has growing significance in Bangladesh's economy, but compared to other industries it is not a major employer or contributor to GDP (Sen 2002). The plastics sector is a relatively recent addition to the national economy, emerging in the early 1980s and establishing itself over the

next decade (BPGMEA 2008). Plastic bag manufacturers employ 18,000 workers, with an additional 7000 working in the recycling sector with an annual turnover of US\$98.9 million. Though plastics is a newer industry, it has grown at almost 20% per annum (KATALYST 2005a).

While the plastics industry does have significance in Bangladesh's economy, it is important to consider its weight alongside the country's historically well-established jute industry which also has large material interests at stake in plastic bag regulation. Prior to plastics development, jute was the primary packaging material and as such was well positioned for a renaissance. Jute is a major national industry and the government has a Ministry of Textiles and Jute which oversees the arms-length organisation, the Bangladesh Jute Mills Corporation, operating a number of jute mills that were nationalised in the 1970s after independence. It is not surprising then that the government's initial industry consultation in 2001 concerning plastic bag regulation included not only plastic manufacturers and bag makers, but also Bangladesh's jute manufacturers associations (Reazuddin 2006).

Compared to the established jute lobby, the plastics industry lobby in Bangladesh is characterised as poorly organised and underdeveloped, indicating that its instrumental power is relatively weak (KATALYST 2005b). This marginal influence of the plastics industry is described in a series of 2005 reports by KATALYST, a project of the development NGO Swisscontact that aims to foster development of Bangladesh's private sector, including the plastics industry. Though at the time of the ban's implementation there were eight established plastic bag industry associations, they failed to speak with a coherent voice (KATALYST 2005a, p. 5). In response to this weakness, the KATALYST project provided both logistical and financial support to the Bangladesh Plastic Goods Manufacturers and Exporters Association (BPGMEA) in their efforts to 'do better lobbying' particularly regarding plastic bag legislation (KATALYST 2005c, p. 1).

At the level of public discourse, the plastics industry in Bangladesh has had difficulty convincing the public of the need for plastic bags. The underpinning norms regarding promotion of health and safety – primarily linked to their role in flooding – that were behind the local anti-plastic bag norm have proven difficult to counter with the common strategy of portraying plastic bags as an environmental best choice due to their recyclability and lower energy use than paper bags. Despite this challenge, BPGMEA recently invested US\$40,000 into a public relations campaign to reframe public discourse by promoting the idea that plastic bags can be recycled. In order for this strategy to gain traction, a much stronger waste management and recycling infrastructure will need to be developed.

The relatively small size of Bangladesh's plastics industry limited its structural power, poor organisation undercut its instrumental power, and the strength of the emergent anti-plastic bag norm's connection to human health and safety, combined with the absence of established recycling infrastructure, limited the industry's discursive power. The inability of the plastics industry to

capture either the regulatory process or public discourse was a critical factor in the translation of the anti-plastic bag norm into national level policy. This national-level policy adoption in response to a domestically emergent norm conforms to existing theories of domestic norm emergence and adoption, a process starkly contrasted to the experience of the United States where stronger material interests were at play.

Strong plastics industry and weaker legislation in the US

Although an anti-plastic bag norm has emerged in the US, particularly in recent years, the policy response has not only lagged behind that of developing countries, but has also been more scattered and typically less stringent. Rather than strong national legislation to ban plastic bags as in Bangladesh, policy responses in the US have been concentrated at the municipal level, as well as voluntary initiatives focused on individual self-restraint promoted by the retail sector. San Francisco became a leading municipality in anti-plastic bag policy when it announced a complete ban on all non-compostable plastic bags for retailers with annual sales in excess of US\$2 million in March 2007 (City of San Francisco 2007). Although San Francisco was the first US city to adopt a ban, its ban is only partial. Other municipalities seeking to emulate San Francisco's policy have seen their efforts thwarted by strong resistance from the plastics industry. The result has been a small and limited legislative response to the anti-plastic bag norm in the US.

The US has a historically strong domestic plastics industry which lends it significant structural power. Plastics are the third largest manufacturing industry in the US, generating US\$379 billion worth of goods in 2007 and employing 1.1 million workers (SPI 2007). With trade associations such as the Society of the Plastics Industry (SPI), dating back to 1937, and the American Plastics Council, a division of the well-established American Chemistry Council (ACC), the US plastics industry commands a strong voice in many policy-making situations. Plastic bag manufacturing employed over 42,000 people in 1999 in nearly 500 manufacturing plants across the country (Film and Bag Federation 1999). The plastic film and bag sector comprises around 13% of all plastics manufacturing in the US (Ibid.).

Given the strong position of the plastics industry in the US economy, it is not surprising that there has been little to no discussion of plastic bags as an issue of national concern requiring national-level policy. Instead, most of the initiatives against plastic bags have been in municipalities where the plastics industry is not a significant local employer.

Discursive strategies to promote competing norms have been aggressively pursued by industry in an attempt to dissuade municipalities from taking legislative steps against plastic bags. Industry's framing of the discourse has focused on 'lifecycle analysis' and embedded energy arguments (see American Plastics Council news releases: http://www.americanchemistry.com/s_plastics/doc.asp?CID=1106&DID=6983 [accessed 13 December 2008]). Regulation

restricting plastic bag use is presented as 'bad policy' based on 'bad science' whereas, according to the ACC, 'Recycling plastic bags is the right approach and makes plastic bags the environmentally responsible choice' (ACC 2008c). This argument is centred on lifecycle analysis demonstrating that plastic bags embody less energy than paper bags, and can be more effectively recycled. Multiple press releases and public statements by industry representatives attempt to position recycling as the only intelligent response to any environmental issues posed by plastic bags (e.g. ACC 2007, 2008a, 2008b, 2008c). Unlike the anti-plastic bag norm that has international resonance due to the human and wildlife health and safety concerns, the competing norm presented by industry is congruent only with established recycling norms in the North.

Because the discursive strategy has not been enough to stop communities in the US from attempting to pursue legislation, industry has also focused on its instrumental power to both lobby and litigate. The San Francisco ordinance was developed after the initial plan to apply a tax on plastic bags, similar to Ireland's plastax, was pre-empted by the California state legislature's prohibition against retailers' charging for plastic bags. According to the San Francisco Department of the Environment, this policy amendment at the state level was a response to the US\$1 million invested by the Progressive Bag Alliance to lobby the state legislature against any kind of plastic bag taxation (Macy 2007). What could have been a more conventional example of norm adoption and associated policy interpretation was in this case intermediated by industry's instrumental power.

Since San Francisco's policy adoption in 2007, the idea of local legislation on the issue has been popular with many other municipalities, particularly in California. Oakland, Fairfax, and Malibu all passed ordinances to ban plastic bags (Malibu Ordinance No. 323; Oakland Ordinance No. 12818; Fairfax Ordinance No. 72). These and other coastal communities in California have come under intense lobbying and threats by the plastics industry associations including the ACC and the Coalition to Support Plastic Bag Recycling (CSPBR, a consortium of plastic bag manufacturers and recyclers affiliated with the ACC) in an effort to prevent diffusion of a bag ban and to reframe the plastic bag as an environmental 'best-choice'. Oakland was sued by the CSPBR after passing its ordinance. Various plastics industry associations and organisations have also employed instrumental strategies including lawsuit threats and council depositions in Malibu, Manhattan Beach, Fairfax and Sonoma Counties (Rogers 2007, City of Manhattan Beach 2008). The use of strategic litigation by industry is part of a larger plan to prevent a domestic policy cascade within the US (Plastic News 2007).

In the US the plastics industry has sufficient structural power to prevent a national-level policy regarding plastic bags from emerging, in effect forcing the issue down to other jurisdictional levels, primarily municipal governments. Los Angeles recently passed a ban on free plastic bags from 2010 and the councillor, Ed Reyes, who proposed the bill stated, '[w]e've gotten to a point where we need to act as a city, where we can have real results' in response to perceived inaction at state level (Associated Press 2008). Here again we see the

role of material interests in reconfiguring domestic policy responses, and by extension shifting away from established patterns of state-led norm dynamics. The applications of industry's structural and instrumental power, and efforts at discourse capture, illustrate ways in which an emergent norm's interpretation into policy must be considered in light of material interests.

Conclusion

In exploring the various dimensions of the politics of anti-plastic shopping bag norms, we have advanced two main arguments. First, at a broad level, there is a need to re-think the 'common wisdom' that global environmental norms are spread primarily from North to South, and by networked transnational social movements or international institutions in organised global campaigns focused around international agreements. Global environmental norms can indeed emerge first in the South and be diffused to the North, and to be successful do not necessarily require an organised campaign led by a global champion, or international agreement to codify them. The case of plastic shopping bags shows that an ad hoc collection of local movements can add up to a globally significant shift in sentiment on a key environmental issue, even in the absence of 'global'-level action and attention.

Second, interpretation of norms into policy, particularly in cases where there is no international treaty to codify the norm, reveals that the process is not linear. Industry actors can and often do play a key role in interpreting norms into policy at the domestic level, which in turn can influence the evolution of international norms. The interpretation of the anti-plastic bag norm into policy has played out in different ways in different countries and at different legislative scales, in large part due to the influence of industry actors. In instances where the plastics industry has a strong economic interest in resisting a bag ban, it tends to be more successful in its attempts to influence legislation over plastic bags, be it through structural, instrumental or discursive means.

In Bangladesh, the plastics industry was weak in all three facets of power, particularly in comparison to the structural and instrumental power of the jute industry with which it competes for packaging. There was synergy between an emergent environmental norm and the material interests of an established, but ailing, national industry which highlights the importance of the domestic environment to policy adoption. The result was a total ban on plastic bags, taken at the national level.

In the US, legislative responses to the emergence of the anti-plastic bag norm also demonstrate the role industry resistance has played in shaping policy. Industry's strong structural power at the national level is likely to prevent national-level legislation, which has focused campaign efforts at the municipal level instead. Industry's discursive efforts have had only partial success in presenting a competing norm (recycling and reuse) in an attempt to prevent municipalities from seeking to promote anti-bag legislation. At the same time, industry has used its instrumental power to bring or threaten

multiple lawsuits against municipalities in an attempt to prevent anti-plastic bag policy implementation. The result has been legislative action primarily at the subnational level, in a scattered fashion. The ability of material interests to prevent national-level policy in some key states can be considered one factor in the absence of any international codification of the anti-plastic bag norm.

These findings based on the plastic shopping bag case suggest that there is scope for further theoretical refinement of international norm dynamics at a broader level. In particular, as the international environmental treaty approach loses traction amongst states, we are likely to see more 'international' environmental activity at the national and subnational level that is not necessarily based on an international agreement (Betsill and Bulkeley 2006). This will require deeper understanding of the way in which new environmental norms emerge and are diffused, as well as the ways in which these new norms are interpreted into policy in different jurisdictions around the world.

References

- American Chemistry Council (ACC), 2007. Plastic makers oppose ban on recyclable plastic bags. *American Chemistry Council* [online], 29 March. Available from: http://www.americanchemistry.com/s_acc/sec_news_article.asp?CID=206&DID=5031 [Accessed 27 March 2009].
- American Chemistry Council (ACC), 2008a. U.S. sets record for plastic bags and film recycling in 2006. *American Chemistry Council* [online], 25 March. Available from: http://www.americanchemistry.com/s_acc/bin.asp?CID=206&DID=7155&DOC=FILE.PDF [Accessed 27 March 2009].
- American Chemistry Council (ACC), 2008b. Seattle mayor's proposal counters national recycling trend bag tax, product ban risk the environment [online]. American Chemistry Council, 4 April. Available from: http://www.americanchemistry.com/s_acc/sec_news_article.asp?CID=206&DID=7208 [Accessed 27 March 2009].
- American Chemistry Council (ACC), 2008c. Proposed Malibu bag ban wrong for environment, falls far short of recycling solution. *American Chemistry Council* [online], 27 May. Available from: http://www.americanchemistry.com/s_acc/sec_news_article.asp?CID=206&DID=7489 [Accessed 27 March 2009].
- Associated Press, 2008. Los Angeles bans plastic bags. *Associated Press* [online], 23 July. Available from: <http://www.theglobeandmail.com/servlet/story/RTGAM.20080723.wlabagban0723/BNStory/International/?page=rss&id=RTGAM.20080723.wlabagban0723> [Accessed 27 March 2009].
- Australian Broadcast Corporation (ABC), 2008. China bans ultra-thin plastic bags, Radio Australia broadcast text [online], 2 June. Available from: <http://www.radioaustralia.net.au/programguide/stories/200806/s2262931.htm> [Accessed 27 March 2009].
- Barkham, P., 2007. World asks town that banned the plastic bag how can we do it too? *The Guardian* [online], 12 May. Available from: <http://www.guardian.co.uk/environment/2007/may/12/uknews.waste> [Accessed 27 March 2009].
- BBC, 2007. East Africa ban on plastic bags. *BBC* [online], 14 June. Available from: <http://news.bbc.co.uk/2/hi/africa/6754127.stm> [Accessed 27 March 2009].
- Benjamin, A., 2007. Public prepared to pay for plastic bags, survey shows. *The Guardian UK* [online], 2 October. Available from: <http://www.guardian.co.uk/environment/2007/oct/02/recycling.waste> [Accessed 27 March 2009].
- Bernstein, Steven, 2001. *The compromise of liberal environmentalism*. New York: Columbia University Press.

- Betsill, M. and Bulkeley, H., 2006. Cities and the multilevel governance of global climate change. *Global Governance* [online], 12, 141–159.
- BPGMEA, 2008. *History of BPGMEA* [online]. Bangladesh Plastic Goods Manufacturers and Exporters Association, Dhaka Bangladesh. Available from: http://www.bpgmea.org/history_bpgmea.php [Accessed 27 March 2009].
- Busch, P., Jörgens, H., and Tews, K., 2005. The global diffusion of regulatory instruments: the making of a new international environmental regime. *The Annals of the American Academy*, 598, 146–167.
- Chauhan, B., 2003. Indian state outlaws plastic bags. *BBC*, 7 August. Available from: http://news.bbc.co.uk/2/hi/south_asia/3132387.stm [Accessed 27 March 2009].
- City of San Francisco, 2007. Plastic Bag Reduction Ordinance. Ordinance number 81–07. Available online: <http://sfgov.org/site/uploadedfiles/bdsupvrs/ordinances07/o0081-07.pdf> [Accessed 27 March 2009].
- City of Manhattan Beach, 2008. *City of Manhattan Beach Minutes of the City Council Regular Meeting*, 3 June 2008. Available from: <http://www.citymb.info/agenda/2008/Ag-Min20080617/20080617-03.pdf> [Accessed 27 March 2009].
- Clapp, J., 2001. *Toxic exports: the transfer of hazardous wastes from rich to poor countries*. Ithaca, NY: Cornell University Press.
- Convery, F., McDonnell, S., and Ferreira, S., 2007. The most popular tax in Europe? Lessons from the Irish plastic bags levy. *Environmental and Resource Economics*, 38, 1–11.
- Daily Mail, 2008. Banish the bags: this green and plastic land in pictures. *Daily Mail* [online], 28 February. Available from: <http://www.dailymail.co.uk/news/article-521549/Banish-bags-This-green-plastic-land-pictures.html> [Accessed 27 March 2009].
- Department of the Environment, Heritage and Local Government, 2007. *Plastic bags* [online]. Department of the Environment, Heritage and Local Government. Available from: <http://www.environ.ie/en/Environment/Waste/PlasticBags/> [Accessed 27 March 2009].
- Down to Earth, 2000. Plastic unlimited [online]. *Down to Earth* [online], 9 (14). Available from: http://www.downtoearth.org.in/full6.asp?foldername=20001215&filename=spr&sec_id=6&sid=1 [Accessed 12 June 2008].
- Dumas, Daisy, 2007. Landfill-on-sea. *Ecologist*, 37 (7), 34–37.
- Edwards, R. and Kellett, R., 2000. *Life in plastic: the impact of plastic on India*. Goa: Other India Press.
- Environment Australia, 2002. Plastic shopping bags – analysis of levies and environmental impacts final report, *Dec* [online]. Available from: <http://www.tud.ttu.ee/material/piirimae/eco-design/Plastic%20bag/analysis-final.pdf> [Accessed 27 March 2009].
- Epstein, C., 2006. The making of global environmental norms: endangered species protection. *Global Environmental Politics*, 6 (2), 32–54.
- Film and Bag Federation, 1999. Plastics film, sheet and bag information. *Film and Bag Federation* [online]. Available from: <http://www.plasticbag.com/industry/PlasticFilmSheetandBagInformation.pdf> [Accessed 27 March 2009].
- Finnemore, M. and Sikkink, K., 1998. International norm dynamics and political change. *International Organization*, 52 (4), 887–917.
- Fuchs, D., 2005. Commanding heights? The strength and fragility of business power in global politics. *Millennium Journal of International Studies*, 33 (3), 771–801.
- Government of South Africa, 2004. Media statement: plastic bag regulations – the 1st anniversary [online]. Available from: <http://www.info.gov.za/speeches/2004/04051012151001.htm> [Accessed 27 March 2009].
- Groves, S., 2008. Bagging the bag a state of mind. *Bay Post* [online], 19 November. Available from: <http://moruya.yourguide.com.au/news/local/news/general/bagging-the-bag-a-state-of-mind/1364356.aspx> [Accessed 27 March 2009].

- Harrold, Max, 2007. Quebec mulls 20-cent tax on plastic shopping bags. *The Gazette* (Montreal), 11 Aug.
- Hasson, R., Leiman, A., and Visser, M., 2007. The economics of plastic bag legislation in South Africa. *South African Journal of Economics*, 75 (1), 66–83.
- Herald Sun, 2007. Near riot over designer shopping bag. *Herald Sun* [online], 6 July. Available from: <http://www.news.com.au/heraldsun/story/0,21985,22029390-5005961,00.html> [Accessed 27 March 2009].
- International Herald Tribune, 2008. China bans free plastic shopping bags. *International Herald Tribune* [online], 8 Jan. Available from: <http://www.ihf.com/articles/2008/01/09/asia/plastic.php> [Accessed 27 March 2009].
- KATALYST, 2005a. *Sector brief – plastics* [online]. Available from: <http://www.katalystbd.com/admin/downloads/20060503114847.pdf> [Accessed 12 June 2008].
- KATALYST, 2005b. *Supporting promotion common forum for plastics BMOs September 2003 to May 2004* [online]. Available from: <http://www.katalystbd.com/admin/downloads/20070820115900.pdf> [Accessed 12 June 2008].
- KATALYST, 2005c. *Intervention Report P5: Supporting common activities of the Association March 2004 to October 2005 & P7: capacity building of the Association July 2003 to November 2004 & P10: Capacity building of BPGMEA with assistance of a policy resource person* [online]. Available from: <http://www.katalystbd.com/admin/downloads/20070821120015.pdf> [Accessed 12 June 2008].
- Keck, M. and Sikkink, K., 1998. *Activists beyond borders: advocacy networks in international politics*. Ithaca, NY: Cornell University Press.
- Krulwich, R., 2000. *India cow killer bagged, but deaths continue* [online]. National Public Radio. Available from: <http://www.npr.org/templates/story/story.php?storyId=91310904> [Accessed 27 March 2009].
- Macy, J., 2007. *San Francisco's plastic bag reduction ordinance*. In: *Presentation at 20/20 Vision Conference Calgary* [online], 27 Sept, Alberta. Available from: <http://www.recycle.ab.ca/2007Proceedings/JackMacy.pdf> [Accessed 22 July 2008].
- McLaughlin, K., 2004. Wrap that in plastic? Not in Taiwan, unless you pay. *The Christian Science Monitor* [online], 15 June. Available from: <http://www.csmonitor.com/2004/0615/p07s02-woap.html> [Accessed 27 March 2009].
- Narayan, P., 2001. *Analysis plastic waste management in India: case study of polybags and PET bottles* [online]. Thesis (MSc). Lund University.
- Ontario Ministry of the Environment, 2007. McGuinty government targets 50 per cent reduction in plastic bag use by 2012. *Press Release* [online], 9 May. Available from: <http://www.ene.gov.on.ca/en/news/2007/050901.php> [Accessed 27 March 2009].
- Ontario Ministry of Energy and Infrastructure, 2008. Bring your own bag to the LCBO. *Press Release* [online], 27 May. Available from: <http://www.pir.gov.on.ca/English/news/2008/q2/n20080527.htm> [Accessed 27 May 2008].
- Plastic News, 2007. An update on proposed plastic bag bans. *Plastic News* [online], 1 Nov. Available from: http://www.flexpack.org/INDUST/PRESS_RELEASES/2007/112007/Update_on_proposed_plastic_bag_bans.pdf [Accessed 27 March 2009].
- Reazuddin, 2006. Banning polyethylene shopping bags: a step forward to promoting environmentally sustainable development in Bangladesh. *Bangladesh Centre for Advanced Studies*. Dhaka: Bangladesh.
- Reuters, 2007. Africa wages war on scourge of plastic bags. *Reuters* [online], 20 August. Available from: <http://www.reuters.com/article/environmentNews/idUSL2060151420070820> [Accessed 27 March 2009].
- Rios, L., Moore, C., and Jones, P., 2007. Persistent organic pollutants carried by synthetic polymers in the ocean environment. *Marine Pollution Bulletin*, 54 (8), 1230–1237.

- Rogers, R., 2007. Fairfax won't back down over bag ban. *Marin Independent Journal* [online], 20 June. Available from: http://www.marinij.com/marin/ci_6672382 [Accessed 27 March 2009].
- San Francisco Department of Environment, 2004. Bay Free Resolution, Resolution No. 007-04-COE [online], 18 November. Available from: http://www.sfgov.org/site/sfenvironment_page.asp?id=28305 [Accessed 27 March 2009].
- Sell, S. and Prakash, A., 2004. Using ideas strategically: the contest between business and NGO networks in intellectual property rights. *International Studies Quarterly*, 48, 143–175.
- Sen, K., 2002. *Globalisation and employment in Bangladesh and Kenya* [online]. Globalisation, Production and Poverty Paper No. 7. University of East Anglia School of Development Studies. Available from: <http://www.undp.org/povertycentre/publications/employment/GlobalisationEmploymentBangladeshKenyaEASTANGLIA.pdf> [Accessed 27 March 2009].
- Seyfang, G., 2005. Shopping for sustainability: can sustainable consumption promote ecological citizenship? *Environmental Politics*, 14 (2), 290–306.
- Shan, S., 2006. Many support EPA ban on throw-away utensils. *Taipei Times* [online], 18 December, p. 2. Available from: <http://www.taipeitimes.com/News/taiwan/archives/2006/12/18/2003340889> [Accessed 27 March 2009].
- Society of Plastics Engineers (SPI), 2007. Two new SPI reports show US plastics industry outpaces other American manufacturing and increases role in global trade. *Society of Plastics Engineers* [online], 8 November. Available from: <http://news.thomasnet.com/companystory/537206> [Accessed 27 March 2009].
- Spokas, K.A., 2007. Plastics: still young, but having a mature impact. *Waste Management*, 28 (3), 473–474.
- Stewardship Ontario, 2007. *Ontario plastics market development strategy*. September.
- Sydney Morning Herald, 2008. Plastics join endangered list. *Sydney Morning Herald* [online], 10 January. Available from: <http://www.smh.com.au/news/environment/plastic-bags-join-endangered-list/2008/01/09/1199554742673.html> [Accessed 27 March 2009].
- Times Online, 2008. *Brown threatens supermarkets over plastic bag reduction* [online], 28 February. <http://www.timesonline.co.uk/tol/news/environment/article3457926.ece> [Accessed 27 March 2009].
- United Nations Environment Programme (UNEP), 2005a. Selection, design and implementation of economic instruments in the solid waste management sector in Kenya: the case of plastic bags [online]. March. Available from: <http://www.unep.ch/etb/publications/EconInst/Kenya.pdf> [Accessed July 2008].
- United Nations Environment Programme (UNEP), 2005b. Plastic bag ban in Kenya proposed as part of a new waste strategy. UNEP Press Release February 2005 [online]. Available from: <http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=424&ArticleID=4734&l=en> [Accessed 27 March 2009].
- United States Environmental Protection Agency (USEPA), 2006. Municipal solid waste in the United States: facts and figures, March [online]. Available from: <http://www.epa.gov/epaoswer/non-hw/muncpl/pubs/mswchar05.pdf> [Accessed 22 July 2008].
- Vidal, J. and Stanway, D., 2008. China boosts global war against the menace of the plastic bag. *The Guardian* [online], 12 Jan. Available from: <http://www.guardian.co.uk/environment/2008/jan/12/plasticbags.recycling> [Accessed 27 March 2009].
- Wallace, R., 2006. Giveaway plastic bags banned. *The Australian* [online], 18 July. Available from: <http://www.theaustralian.news.com.au/story/0,20867,19823466-27652,00.html> [Accessed 27 March 2009].
- Worldwatch Institute, 2004. *Good stuff? A behind-the-scenes guide to the thing we buy* [online]. Available from: <http://www.worldwatch.org/system/files?file=GS0000.pdf> [Accessed 27 March 2009].