

Butt Wait, There's More?

A Report on the Interaction Between Cigarette Litter and the Tobacco Industry

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Public Health Report by
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Abstract

This report examines the interaction between cigarette litter and the tobacco industry. The three overall aims for the report were: (i) What is the extent of the cigarette butt litter problem in New Zealand?; (ii) How is this problem perceived and dealt with by environmental groups, councils, the tobacco industry and the public health sector? and; (iii) What is the nature of the relationship between these key players and what implications do these relationships have?

Tobacco use is still a significant problem in New Zealand, with prevalence of smoking at 21% (>15 years old). In 2008, 2.5 billion cigarettes were sold in New Zealand. The extent of the consequent cigarette litter is poorly quantified. Relevant New Zealand legislation includes The Litter Act (1979) and the Smoke-Free Environments Act (1990). Increasing restrictions on tobacco marketing has led to tobacco industries adopting corporate social responsibility strategies (CSR), including involvement in anti-litter groups such as Keep New Zealand Beautiful.

To investigate cigarette litter and the tobacco industry in New Zealand, four approaches were taken. Study One was a survey of environmental organisations; Study Two was a systematic review of the literature in relation to interventions used to minimise cigarette litter; Study Three was surveys and interviews with representatives from local councils and Study Four was interviews with stakeholders in the tobacco industry/anti-litter group interface.

Four environmental groups were surveyed. All four agreed that cigarette litter was a problem for their organisation, but varied on possible solutions to the problem.

The systematic review found four relevant studies (two interventional and two governmental reports) that examined the effectiveness of interventions aimed at reducing cigarette litter. Three out of the four studies specifically found that butt bins reduced cigarette litter when placed in appropriate locations. However statistical significance was only reported for one study.

Staff from ten councils were either interviewed (four) or surveyed (six). Tobacco related litter was more of a concern in tourist and high population areas. Councils used varied approaches such as butt bins, a litter bylaw, education campaigns, and smoke-free outdoor areas to deal with tobacco related litter. Awareness of other approaches and measures to judge the efficacy

of these approaches was limited. Due to the lack of objective data, council staff opinions formed the majority of this work.

British American Tobacco New Zealand (BATNZ) declined to participate in the research. An interview with Action on Smoking and Health (ASH) discussed the negative consequences of tobacco industry funding of environmental groups. The interview with Keep New Zealand Beautiful (KNZB) clarified further the relationship between BATNZ, KNZB and Smokin' Station.

Limitations of the four studies include low response rates, and the short-time frame in which to conduct the studies. Strengths include the originality of the research, in particular for a New Zealand context.

In general, there is a paucity of data in this arena. Additionally, community groups and Maori are not often consulted when researching or implementing interventions. Information about the tobacco industry's CSR policies and objectives need to be widely disseminated, and measures taken to counter these policies. The Smoke-Free Environments Act should be progressively amended to restrict outdoor smoking to smaller outdoor zones. This would help decrease the prevalence of tobacco use, and therefore the burden of disease caused by its use (as well as helping localise tobacco litter).

Specific recommendations include:

1. That independent scientific research be conducted to examine:
 - the extent of the cigarette litter problem in New Zealand.
 - the biodegradability and environmental toxicity of cigarette butts
 - the effectiveness of cigarette litter interventions (e.g. butt bins, smoke-free parks); and to compare these interventions with each other with respect to decreasing both, the prevalence of tobacco related litter, and the prevalence of tobacco use.

- other effects of cigarette litter interventions, for example, providing social cues to smoking and normalising smoking behaviour (especially among children and adolescents).
2. That as part of this research and the implementation of interventions to reduce cigarette litter, key stakeholders, community groups, Iwi and Maori Health providers be consulted.
 3. That the New Zealand Government set up a national on-line database on aspects of anti-litter programmes, including providing information on specific cigarette litter interventions, the organisations involved and their funding sources.
 4. That the New Zealand Government explores the scope and extent of CSR related funding by the tobacco industry in New Zealand and explore the feasibility of a ban of direct and indirect tobacco industry CSR related funding of any organisations.
 5. That in the event of a ban on CSR funding, the New Zealand government set up a time-limited pool of funding to help organisations with replacing tobacco industry funding.
 6. That Government move to increase restrictions on outdoor smoking, limiting it to progressively smaller areas.

Preface

The idea for this report was conceived by the Cancer Society of New Zealand. All other aspects of the report however, including the study designs and collection, analysis, interpretation and publication of data were carried out independently by medical students and the Department of Public Health at the University of Otago, Wellington, New Zealand.

No external funding was provided for this project, and overheads were met solely by the Department of Public Health.

We would like to sincerely thank the participants in the studies presented in this report. The participants include environmental groups, New Zealand local authorities, Action on Smoking and Health, and Keep New Zealand Beautiful. Without them this report would not have been possible.

Additionally, we are grateful to the Department of Public Health for supporting us through this project; and in particular Kerry Hurley for her administrative assistance.

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Chapter One

Introduction

1.1 Preamble

A great deal of research has been done on the negative health consequences of tobacco use (1-5). Recently the World Health Organisation (WHO) and the World Bank released the Global Burden of Disease and Risk Factors Project for the year 2001 (6). This report used a summary measure of population health known as the Disability Adjusted Life Year or DALY, which is the sum of years of healthy life lost due to premature mortality (YLL) and years of healthy life lost as a result of disability (YLD). The project analysed the burden of disease attributable to selected major risk factors including tobacco. Tobacco use was ranked as the *fourth leading cause of disease burden globally* (72.9 million DALYs; 5% of total DALYs), but as the *number one cause of disease burden in high-income countries* (18.9 million DALYs; 13% of total DALYs). It ranked *fourth in low- and middle-income countries but caused a higher burden of disease than in high-income countries* (54.0 million DALYs; 4% of total DALYs). It is evident therefore, that in order to eradicate this high burden of disease due to tobacco use, a number of different methods need to be employed by clinicians, public health staff, community groups, economists and policy makers alike.

A less researched facet of the tobacco issue is tobacco-related litter. Cigarette litter may affect health in a number of ways, such as the normalisation of smoking related behaviour and providing cues for smoking. In this report we will examine how cigarette litter, anti-litter groups, local and national government, and the tobacco industry interact, and what can be done to help reduce tobacco use and the burden of disease caused by its use.

This chapter provides some background on (i) tobacco use, (ii) the extent of cigarette litter, (iii) relevant legislation, (iv) tobacco marketing, and (v) the documentation on relationships between tobacco companies, litter and anti-litter organisations.

Chapters 2-6 will detail the four studies used to investigate the issues and interactions highlighted above - and in particular within a New Zealand context. Our specific questions were:

1. What is the extent of the cigarette butt litter problem in New Zealand?

2. How is this problem perceived and dealt with by environmental groups, councils, the tobacco industry and the public health sector?
3. What is the nature of the relationship between these key players and what implications do these relationships have?

This was conducted through four different approaches:

1. A survey of environmental organisations – with an aim to further elucidate the problem of tobacco related litter within New Zealand.
2. A systematic review of the literature in relation to interventions used to minimise cigarette litter.
3. Surveys and interviews with representatives from local councils – with the aim to get a local governmental perspective of the tobacco related litter problem, interventions to reduce tobacco related litter, and the interaction between the tobacco industry and anti-litter groups.
4. Interviews with stakeholders in the tobacco industry/anti-litter group interface – with a case in point example of Keep New Zealand Beautiful and British American Tobacco.

Chapter 7 discusses the results, and provides recommendations.

1.2 Prevalence of Tobacco Use

Globally, 1.1 billion adults smoke, over 80% of whom are from low and middle-income countries (7). Among these countries, the prevalence of smoking has increased since 1970 to 49% in males and 9% in females (7). In high-income countries smoking prevalence is now declining from a peak during the 1980s to 39% of males and 22% in females in 1995 (7).

The current prevalence of smoking in New Zealand is 21% in the population 15 years old and over (8), up by 1% over the previous year but generally consistent with the downward trend since 1983. Among adults aged less than 65 years, for males, the highest prevalence is 40.9% in the 25-29 years age bracket, while for females the highest is 33.0% in the 20-24 years age bracket (8). In both sexes, the prevalence decreases in older age groups with the lowest rates in the 60-64 years group. There is a significant difference between the sexes only in the 25-29 years bracket, where currently males are more likely to smoke (8). Level of deprivation

strongly correlates with smoking status in New Zealand. People in the most deprived areas (NZDep 2006 quintile 5) are more than 1.5 times as likely to be current smokers compared to people living in the least deprived areas (NZDep 2006 quintile 1) (8). Additionally, by ethnicity, Maori have the highest smoking rates in New Zealand with a prevalence of 40.4% in males and 49.7% in females (8).

1.3 Extent of Cigarette Litter

To identify relevant New Zealand data, we undertook Medline and Google Scholar searches for articles relating to “tobacco, smoking or cigarette” and “litter, butts or filters”. We also first included the search term “Zealand”, although this was omitted when it became apparent that there was a limited amount of articles relating to this topic. The search was widened to include international articles. References from the bibliographies of articles were also reviewed to find relevant articles. To further identify literature, the following databases were also used; ISI Web of Science, Scopus and Proquest.

For completeness a review of the grey literature is also provided in Appendix One:.

Over the last 50 years, smokers have switched almost entirely to filtered cigarettes (9). At present, 90% of cigarettes sold worldwide contain a filter (10). Of these, nearly all filters are made of cellulose acetate, a plastic product with each filter containing over 12 000 fibres (10, 11). There are conflicting studies regarding the biodegradability of cigarette filters. One study states that there is the potential for bio-degradation over a long period of time, but does not detail an exact time period (12). A recent article in the Proceedings of World Academy of Science, Engineering and Technology stated that cellulose acetate filters can take up to 18 months or more to breakdown under normal litter conditions (13). Another study found that cellulose acetate fibres are photodegradable but not bio-degradable (12), and another found that cellulose acetate fibres may persist under normal environmental conditions for 18 months or more before degrading (9). Cigarette butts discarded in city streets enter storm water systems, sewers or drainage ditches and follow larger water ways to the ocean (14). The butts themselves pose a health risk to children and animals that may ingest them. Ingestion of three cigarette butts is enough to cause significant toxicity in children (15).

In 2002 an estimated 5.6 trillion commercially manufactured cigarettes were consumed worldwide (9). It is expected that by 2025 consumption will rise to 9 trillion cigarettes,

leading to a significantly increased global health burden. There are varying estimates as to the amount of cigarette butt litter. One such estimate from 2008 that drew on data from the US Centres for Disease Control and Prevention, Keep America Beautiful and New Scientist Magazine estimated that 854,000 tonnes of butts end up as litter worldwide each year (16).

Individual clean up operations have also described the nature of the litter collected in various locations and the extent of the issue.

One clean up campaign carried out in Orange County, California surveyed beach debris collected at 43 sites along the coast between 2 August and 18 September 1998 (17). Of an estimated 106 million items of litter, 13% (139 447) were cigarette butts.

The 2007 International Coastal Cleanup report found that smoking-related products (cigarette filters, cigar tips, and tobacco packaging) accounted for 57.8% of the debris found in New Zealand, of which 55.1% were cigarettes and or cigarette filters (18). This was following a removal of 426 kilograms of rubbish and debris from 23.4 kilometres of shoreline.

Worldwide, these items comprised 33.6% of the 2.7 million kilograms of debris collected in similar clean up operations (18).

The Clean Up Australia Rubbish Report 2008 sampled a total of 363, 854 items of rubbish collected across 1,058 sites (19). Of this, cigarette butts were the most commonly found rubbish item, accounting for 14.5% of all items surveyed. This has been noted for 13 consecutive years of similar cleanup campaigns.

A study in conjunction with the City of Melbourne and Community Change used an observational approach to survey littering (20). The 1556 people observed in sites around Melbourne were seen to dispose of 1942 items, 980 of which were cigarette butts. Of these, one quarter were littered as opposed to disposed of in a bin. Butts comprised 87% of all littered items in Melbourne City.

1.4 New Zealand Governmental Legislation Relating to Litter

New Zealand governmental documents/legislation in relation to tobacco related litter and smoke-free environments are reviewed below.

1.4.1 Litter Act

In general, there are few specific governmental documents (both at a local and national level) in relation to tobacco related *litter*. The sole relevant New Zealand (NZ) legislation is the Litter Act of 1979 (21). This Act is a framework for how councils can and should enforce policies around litter. The Act also outlines the role of KNZB in NZ, which is to promote litter control. Keep New Zealand Beautiful is further discussed below in Section 1.7, Page 21.

Section 9 (1) of the Litter Act 1979 states that wherever litter is likely to be deposited, at all times there must be the appropriate number of suitably designed and constructed litter receptacles as may reasonably be necessary to keep the place free from litter. The onus is placed on the local council to ensure appropriate litter bins for cigarette litter disposal.

Under the Litter Act, councils have the freedom to address this issue in other ways (21). As an example, some councils around New Zealand employ Litter Officers and Wardens, discuss and implement bylaws, and create specific infringement policies (22-25). The use of Litter Officers, which can include parking wardens, police officers and harbourmasters, is sanctioned by Sections 5-8 of the Litter Act 1979. These Litter Control Officers may issue infringement notices, with the fee not exceeding \$400 (21).

Additionally, at a national level, New Zealand has historically defined tobacco as ‘toxic’, under the Toxic Substances Act 1983 (26). ‘Toxic’ litter, under the Litter Act 1979 carries the greater penalty (up to \$7500 fine, or maximum 1 month in prison), and may be handed to the offender who litters cigarette butts (22) for what is regarded as a toxic illegal act.

1.4.2 Smoke-Free Environments Act

The Smoke-Free Environments Act is an act of parliament in New Zealand which was passed in 1990. In 2003 an amendment was made to the original act, resulting in the Smoke-free Environments Amendment Act 2003. As with the original Act, the smokefree legislation amendment was designed to protect non-smokers from second-hand smoke. The parts of the smokefree legislation relevant to litter are discussed below.

There are two relevant parts; (i) to create smoke-free work-places and public areas, and (ii) to control smoking products.

The purpose of ‘smoke-free workplace and public places’ was to prevent the detrimental effect of passive smoking on the health of people in the workplace, or in certain public

enclosed areas. The first study to estimate the health impact of passive smoking in New Zealand showed that inhalation of environmental tobacco at work was responsible for 145 deaths per year in the 1980s (26).

Another important purpose of the Smoke-Free Environment Act was to reduce the influence on, and exposure of, children and adolescents to smokers and cigarettes. The uptake of smoking has been strongly associated with smoking behaviour in friends and siblings (27).

The second part of the Act aimed to increase regulation of smoking products and to reduce social approval of tobacco, particularly among young people. The main methods used were to impose controls on the marketing, advertising and promotion of tobacco products. It also required that health messages be displayed on packages containing tobacco products.

1.5 The Tobacco Market and Corporate Social Responsibility

In order to understand the potential impacts of the relationships between the tobacco industry and anti-litter groups, we examine two important issues. Firstly, the market for tobacco sales in New Zealand will be discussed, including size, demographics and the legislative climate with regard to tobacco advertising. Additionally, the origins of corporate social responsibility (CSR) will be described, and the manner in which CSR has been employed in general by the tobacco industry in response to restrictions on tobacco promotion.

To identify relevant data, we searched the following databases, Medline, ISI Web of Science, Scopus and Proquest, using the search terms “tobacco, smoking or cigarette” and “market, corporate, social responsibility.” References from the bibliographies of articles were also reviewed to find relevant articles. In addition, we also searched relevant websites¹ for released tobacco industry documents. Further, articles were sourced using Google Scholar.

1.5.1 Tobacco Market

The tobacco industry in New Zealand is comprised of three main players. British American Tobacco (BAT) New Zealand occupies 80% of the local market (28) and is a subsidiary of BAT Australasia, a division of BAT international. Imperial Tobacco and Philip Morris NZ occupy the remainder of the market. These companies collectively pay NZ\$1.1 billion in tax each year (28) as levies on the 2.5 billion cigarettes and 870 tonnes of tobacco

¹ <http://tobaccodocuments.org/> and <http://legacy.library.ucsf.edu/>

available for consumption in 2008 (29). Indeed at no point since 1988 has the number of cigarettes annually available for consumption dropped below 2 billion (29). The 2008 figures represent an increase of 4.3% in cigarettes released and a decrease of 3.7% in tonnes of tobacco released for consumption on the previous year. Interestingly, BATNZ quote a figure of 1.7 billion cigarettes produced by the industry in 2008 (28), some 32% lower than the figure of 2.5 billion Statistics NZ quotes for the same period (29).

The sale of tobacco products in New Zealand today is not heavily regulated, in that any business can sell tobacco to adults (30). However, there are strict guidelines laid out in the Smoke-Free Environments Act of 1990 as to when and how the tobacco industry may publicise and promote their products (30). This current environment came about in response to the weight of medical evidence linking smoking to an increased disease burden.

In 1962, the tobacco industry in New Zealand voluntarily agreed to avoid advertising to youths and the Department of Health started their first anti-smoking program. Legislation passed in 1963 banned advertising cigarettes on television and radio, and in 1973 from billboards and in cinemas (35). This forced the tobacco companies to re-think their advertising strategies, sponsorship and print media were the new focus of their efforts. Restrictions on print media advertising of tobacco came into effect in 1979, causing a 50% decrease over the next decade while televised sponsorship rose by ten times (34).

The Smoke-Free Environments Act passed into New Zealand law in August of 1990 after a period of intense lobbying both for and against its introduction. This stopped all new tobacco advertising and sponsorship (Weir 1995). The Act did allow for point-of-sale signs and existing sponsorship agreements to stay in place until 1995 however. The tobacco industry made full use of a loophole in the act allowing them to circulate large full-colour “price lists”, consisting of a cigarette advertisement with a small warning sign and price list to one side (35).

Despite the ban on all cigarette advertising coming into effect in 1995 and the 1997 amendments to the act where incentives and rebates to retailers became illegal, tobacco companies continued to advertise their products in stores. They rented part of the shop from the owner and had their own staff arrange and stock their display in this space (42). The 1997 amendments to the act also included strengthening the health warnings on cigarette packets and restricting price list “advertising” (43).

The Smoke-Free Environments Act as it exists presently exempts art, films and publications originating outside of New Zealand whose purpose are not primarily to advertise tobacco nor are they primarily meant for a New Zealand audience. It does allow, however, for the “incidental” appearance of tobacco advertisements in films and videos, leading to the now popular practise of “product placement” in such media as forms of indirect advertising.

The current act also forbids any financial contributions towards or organising and promotion of activities in New Zealand, where the tobacco company’s name or trademarks are used anywhere but on tobacco products themselves, including prizes, scholarships and services. Exemptions for international races may be granted by the Minister for the Environment, a clause designed to allow for yacht races to stop in New Zealand, and for multinational sporting events. In addition, no goods of any nature are to be sold or distributed with tobacco names or trademarks on them other than tobacco products themselves”(30).

“To sell a product that kills up to half of all its users requires extraordinary marketing savvy. Tobacco manufacturers are some of the best marketers in the world — and increasingly aggressive at circumventing prohibitions on advertising, promotion and sponsorship that are designed to curb tobacco use.”(49)

As a result, the tobacco industry has changed tack in terms of its advertising strategy. They have switched from directly marketing their products to consumers to a focus on trying to promote their brand names through positive associations with community groups and projects to garner respect. And so the concept of corporate social responsibility (CSR) was born.

Table 1: Summary on the New Zealand tobacco market

Tobacco Market
<ul style="list-style-type: none"> • British American Tobacco NZ is the biggest tobacco company in NZ (80% of market), followed by Imperial Tobacco and Philip Morris. • The Smoke-free Environments Act 1990 and its subsequent amendments are the most significant pieces of tobacco control legislation in NZ. • The tobacco industry adopted Corporate Social Responsibility (CSR) in respond to the anti-tobacco environment.

1.5.2 The Origins of Corporate Social Responsibility (CSR)

Corporate social responsibility is a relatively new concept. CSR is essentially the idea that businesses should make some attempt to address the adverse consequences that their business activities can have on communities, or on the environment (50).

A large body of academic theory has developed around CSR (51), with one theorist stating that current CSR policies are ‘The latest manifestation of the longstanding debate over the relationship between business and society’ (52). The Economist, states that “*public companies are creations of the state. In return for the privilege of limited liability, society has always demanded vaguely good behaviour from them*” (53).

The relationship between business and society over the centuries displays an ‘ebb and flow’ dynamic, with periods where businesses exert control followed by societal efforts to regulate business activities (52). The idea that increased business and trade is good for society on general has its origin with Adam Smith’s Wealth of Nations in 1776, and the idea of corporate social responsibility can be seen to evolve from there (54).

The idea however of what constitutes ‘socially responsible’ behaviour has changed with time. What was seen as responsible during the industrial revolution would not be seen as responsible now. In the 19th century business philanthropists funded the establishment of institutions, but there was little regard for labour rights or the environment (55). However the growing pressure from NGOs over the last fifty years, who were ‘energised’ by disasters such as Bhopal and the Exxon Valdez oil spill, has led to increased pressure for businesses to address their impacts on society (55). CSR policies are often seen by corporations as effective risk-management strategies, in an era where they find themselves under increased scrutiny (55). In addition, it is argued that CSR can safeguard or improve the reputation of a corporation, leading to an increased competitive advantage (56).

There has been wide adoption of CSR in the last decade as companies have looked to show that they are meeting environmental and social obligations (55). The 1980s were a period of little business regulation in both the developed and developing worlds, but by the 1990s there were increased calls for regulation of corporate activities (50). After the 1992 Rio Earth Summit, with increasing calls from NGOs for the regulation of business, there was increased voluntary adoption of CSR (57). Pressures for responsible investing led to corporations

instituting 'triple bottom line' reports, which take into account social and environmental effects of their activities (50).

As CSR policies are utilised by corporations on a voluntary basis, there is no concrete definition of what CSR is, and what constitutes a 'socially responsible' action. CSR can also often be defined in negative terms, by explaining what businesses should not be doing rather than offering suggestions as to responsible actions. The United Nations (UN) Global Compact brought together UN agencies, business, labour and civil society groups to establish 'voluntary principles' for human and labour rights and the environment (50). This has been deemed 'blue wash' in some quarters - businesses trying to legitimise their activities through association with the UN flag. The opposing view is that CSR is a threat to the free market and prosperity, and that corporations should have no obligations other than maximising returns to their shareholders (50, 53). In some parts of the world there is limited regulation of corporate activities. For example, in the United Kingdom the 2006 Companies Act introduced a requirement for public companies to report on social and environmental matters (55).

Corporations exist to maximise returns to shareholders. However, 'stakeholders' – people affected by the operations of corporations – are increasingly seen as deserving input. Campbell proposes the concept of a 'minimum acceptable standard', decided upon with input from stakeholders, below which would be seen as irresponsible (51). Evidence of the increasing acceptance of CSR is shown by management theory. Management courses generally now teach that 'good' businesses have responsibilities to stakeholders, in a form of social contract that goes further than just applying to shareholders in the traditional sense (50).

Corporate Social Responsibility is often seen as nothing more than an insincere public relations campaign, more reflective of the capacity of a corporation to respond to social pressure rather than its capacity to do good (53, 56, 58). Some reports however state that if corporate efforts are genuine, there can be improvements in social and environmental outcomes (51, 57). Campbell published a study that sought to examine the structural conditions under which corporations would be most likely to engage in socially responsible behaviour (51, 57). He proposed that strong and well enforced regulations, developed through consensus building among corporations and stakeholders, were required to create a climate conducive to responsible behaviour.

1.5.2.1 *Tobacco companies and CSR*

Tobacco companies have actively adopted CSR programmes, especially since the 1998 Master States Agreement in the United States. This saw the tobacco industry pay US\$206 billion in compensation to the US states, and also required some industry documents to be made available on the internet (59).

This was at a time when serious damage had been done to the reputation of the tobacco industry, which had for many years argued that there were no links between smoking and ill health, and to their knowledge, smoking was not addictive (60). Many documents released under the Master States Agreement showed that the industry believed that increased CSR uptake could restore their image and help to maintain profitability (50, 59-63).

Phillip Morris policy documents speak very candidly of their aims to regain public respect, investor confidence and employee morale by embracing the principle of corporate responsibility (50). Their stated reasons for adopting high profile CSR efforts included ‘restoring battered reputation, maintaining employee morale, mitigating future lawsuits and thereby increasing the value of corporate stock’ (50).

In 1998, Phillip Morris underwent restructuring and the Global Corporate Affairs Council (GCAC) was established along with representatives from the food and alcohol industries (63). The GCAC produced a Global Corporate Affairs Plan, which had as its primary goal ‘societal alignment.’ This was defined as ‘strategies and programmes to ensure that our operations and activities respond to societal expectations of a responsible company.’ This was a direct result of the widespread negative perception of the industry, which Phillip Morris saw it had to respond to. The company believed that it had ‘clung to old stances while society has moved on to new beliefs and new language about smoking’ (63).

Tobacco CSR activities, or ‘societal alignment’ policies are high profile and carefully chosen. In 2000 in the US, Phillip Morris spent US\$115 million of their US\$23 billion revenue on a variety of causes including disaster relief and anti-domestic violence programmes (60). They then spent \$150 million on a national advertising campaign to inform the US of their donations (60).

British American Tobacco (BAT), the company with market dominance in New Zealand, has adopted CSR for similar motivations. Internal strategy documents released prior to the

establishment of the 2003 World Health Organisation Framework Convention on Tobacco Control (FCTC) included the following statements:

'Assuming that a FCTC – in whatever form – is a certainty, British American Tobacco's strategy now needs to adopt a two-tier approach: lobbying and reputation management.' (61)

To achieve this BAT sought to be seen to work with community groups and NGOs:

'Much pressure emanates from labour/human rights and environment NGOs'

'NGO engagement will start in these clusters.' (61)

British American Tobacco sought to concentrate on:

'substantive engagement with well respected and reasonable NGOs, centrally and at end market level – and to brand and communicate it.'

The long term goal was to:

'grow partnerships with NGOs and get their third party verification/support for BAT's achievements and standards of business integrity.' (61)

Tobacco company CSR programmes have always attracted heavy criticisms, particularly the attempts to gain entry to conferences and award ceremonies. Industry sponsorship of an ethical corporation conference in Hong Kong in 2004 was cancelled after international outrage and a petition by 86 ethicists (59). The opinion in the health sector is that the benefits of CSR accrue entirely to the tobacco industry (59). The return for the small expenditure (relative to the industry profits) comes in the form of “respectability, legitimacy and the right to continue doing – and growing – its business. In other words the cost is more tobacco users, more addiction and more premature death” (58).

In the larger scheme of things, there are concerns that tobacco industry CSR programmes will actually detract from public health efforts:

"Voluntary programs, corporate advertising, industry youth smoking prevention programs, philanthropy, sponsorships, support for weak policies and other forms of "alignment" may undermine countries' ability to pass strong tobacco control

measures, especially in countries with limited tobacco control infrastructure, little experience dealing with the multinational tobacco industry and tepid political support for tobacco control. Within this context, "aligning" with PM [Philip Morris] can only have deleterious effects on public health" (63).

In the developing world, attempts have been made by the tobacco industry to reprioritise and 'rebrand' health efforts away from effects of tobacco towards issues such as HIV/AIDS and hepatitis (61). Tobacco control efforts are portrayed as reflecting white western priorities. This is despite the industry often turning down requests by HIV/AIDS groups for funding, and by increasing the global production of tobacco so as to lower purchasing costs (61). Released industry documents have also shown that CSR programmes, such as Phillip Morris' Project Sunrise, also had the goals of dividing and creating divisions in the public health sector (62).

It is in many ways an unbridgeable divide between the tobacco industry and the people the industry refers to as '*the antis*' – the public health sector. The debates over CSR are reflective of this, as the health sector sees selling a product that will kill a significant proportion of its consumers entirely incompatible with any idea of responsible behaviour (50, 63).

Table 2: Summary of the origins of corporate social responsibility (CSR)

Origins of Corporate Social Responsibility (CSR)
<ul style="list-style-type: none"> • CSR policies are often seen by corporations as effective risk management strategies, and as means of safeguarding or improving the reputation of a corporation • CSR is seen by critics as an insincere public relations strategy, more reflective of the capacity of a corporation to respond to social pressure than its capacity to do good • The tobacco industry believes that increased CSR uptake could restore their damaged image, allow them to regain public respect, investor confidence and employee morale, mitigate future lawsuits and maintain profitability • Tobacco companies such as Philip Morris and British American Tobacco (BAT) spend large amounts of money on CSR activities and an equally large or higher amount on advertising campaigns to let their efforts be known

1.6 The Tobacco Industry and Anti-Litter Groups

The tobacco industry has formed business partnerships with various environmental organisations. Of particular relevance to this report is their partnership with anti-litter groups.

This section will discuss the nature of the partnership from the perspective of both the tobacco industry and the public health sector. It will also highlight key arguments from both parties as to the reason why these partnerships exist at all.

To identify relevant data, we searched the following databases, Medline, ISI Web of Science, Scopus and Proquest, using the search terms “tobacco, smoking or cigarette” and “industry, litter, rubbish, butts, environment.” References from the bibliographies of articles were also reviewed to find relevant articles. In addition, we also searched relevant websites² for released tobacco industry documents. Further, articles were also sourced using Google Scholar.

1.6.1 Why have tobacco companies formed partnerships with anti-litter organisations?

Worldwide, tobacco companies are directly participating in anti-litter campaigns specifically directed at cigarette related litter (64-69). These campaigns are fully or partially funded by tobacco companies. However, they are carried out by local government authorities or the “Keep [your country] Beautiful” organisation as opposed to the tobacco companies themselves. Tobacco companies, like British American Tobacco (BAT), have also developed specific anti-litter trusts such as the Butt Littering Trust (BLT) in Australia. These anti-litter trusts are solely funded by BAT and BAT has representatives on their managing boards (70).

The tobacco industry’s involvement with anti-litter campaigns is a hotly debated topic. On one end of the spectrum there is the tobacco industry, who claims that their goal is to minimize the environmental effect of their product and maintain a good corporate image. On the other end of the spectrum there is the public health sector, who question the true motives of the tobacco industry’s involvement.

1.6.2 The Tobacco Industry Strategies and Activities on Litter

The initial stance of the tobacco industry regarding cigarette butt litter was quite clear; “People cause litter and the main way to reduce it is for people to be more responsible in the way they dispose of it” (71). Tobacco Companies and their associated anti-litter organisation believed that “In the case of smokers it is most likely a lack of awareness that cigarette butts constitute a form of litter” (69). Subsequent consumer research by tobacco companies on cigarette litter found that the issue was not “top of mind” for smokers (72), that there is ritualised behaviour in the disposal of cigarette butts, and that “adults who choose to smoke

² <http://tobaccodocuments.org/> and <http://legacy.library.ucsf.edu/>

need convenient alternatives to cigarette disposal (9, 73). As a result of this research, and due to increased pressure from environmental and anti-smoking groups, the tobacco industry has altered its approach to the litter issue. They have instituted environmental management strategies, with a focus on minimising the impact of cigarette butt litter on the natural environment (74). The most recognised strategies have been:

1. Funding not-for-profit environmental organisations such as “Keep [your country] Beautiful” all around the world;
2. Establishing the Butt Littering Trust (BLT) and;
3. Activities by the tobacco industry itself

These are discussed in detail below.

1.6.2.1 Funding Not-for-Profit Environmental Organisations such as “Keep [your country] Beautiful” all around the World.

In America, the Phillip Morris tobacco company encourages the use of portable litter devices through the “Keep America Beautiful” organisation (69).

In New Zealand, BAT has provided funds to “Keep New Zealand Beautiful” in order to implement a cigarette butt litter campaign. Part of the campaign provides education tool kits to educate smokers on responsibly disposing of their cigarette butts in specifically designed litter receptacles (75).

Keep New Zealand Beautiful has also developed a tool kit (included in Appendix One: aimed at reducing cigarette butt litter through the installation of cigarette butt bins. This toolkit has been circulated to New Zealand councils. The toolkit outlines the project to reduce cigarette butt litter, which KNZB frames in terms of their purpose of litter control. They recommend strategic placement of these butt bins in notorious butt-polluted areas, and the tool kit outlines success from the pilot programmes in Wellington and parts of Auckland.

The relationship between BAT, KNZB and related organisations are discussed in detail in section 1.7, page 21.

1.6.2.2 *Establishing the Butt Littering Trust (BLT)*

The intention of the BLT is “to be Australia's leading independent organisation on butt littering reduction and provider of Butt-Free Solutions to reduce cigarette butt littering” (76). The BLT has funded over sixty programs, mainly in partnership with local government authorities (70). These programs provide toolkits which help those who are interested to assess, plan and implement a butt free program in their communities. Amongst the solutions are; smoker education, specialised butt-bins and transportable ashtrays (70, 76).

1.6.2.3 *The Tobacco Industry Itself*

Tobacco companies themselves communicate litter prevention messages through their websites, and directly to consumers, through on-pack “Please Don’t Litter” messages. They have also developed periodic direct-mail programs to adult smokers (21 and older; 77)

The tobacco industry, as well as associated anti-litter organisations, emphasise that funding is provided on a “no strings attached” basis, and that this is transparently documented (67, 70, 75). They also state that it is the organisation and not the tobacco company who solely decides how to spend the money and how to get results (67, 70, 75). According to these organisations and various tobacco companies, these initiatives have resulted in significant reductions in the amount of cigarette butt litter. The reduction is reported to be approximately twenty six percent in Australia and greater than fifty percent in some communities in America (69, 70, 78). From the tobacco industry’s perspective, they are providing funds which are aiding in minimising the impact of pollution due to cigarette butts. They believe they are fulfilling their corporate responsibility to society by being active partners in promoting a litter-free environment (79).

Tobacco advocates might argue that the industry is in fact taking a risk when funding independent not for profit organisations. The industry has no control over how the funds are spent. Additionally, if its efforts are only seen as a tool to manipulate their public image, this could further enforce public mistrust. However, various tobacco companies maintain that they accept the costs associated with funding various environmental organisations, as they realise their contribution to the problem, and are prepared to be a part of the solution (80-83).

1.6.3 The Public Health Sector

According to public health specialists “the best way to reduce cigarette butt litter is to reduce smoking” (84). The public health sector strongly believes that tobacco companies have ulterior motives in funding anti-litter campaigns (64, 85-87). There are also those who believe that it is unethical for any organisation to accept funding from an industry which is known to produce a harmful product, both to human beings and the environment (88-91). The main arguments presented by the public health sector, for why they believe the tobacco industry is involved with anti-litter organisations are as follows:

1. Partnerships with specific Non Government Organisations (NGOs) create respectability by association
2. The tobacco industry portraying itself as a responsible corporate entity
3. The tobacco industry using anti-litter campaigns to promote / advertise its product

These are reviewed in detail below.

1.6.3.1 *Partnerships with specific Non Government Organisations (NGOs) creating respectability by association*

Tobacco companies have gone to extraordinary lengths to develop partnerships with recognised NGOs. A BAT strategy document discussed how BAT would concentrate its efforts on developing a “substantive engagement with well-respected and reasonable NGOs, centrally and at end market level – and to brand and communicate it” (92). The tobacco industry believes that they can drown out calls for regulations and minimize any negative associations with their product or the consumers of their product, by fostering these partnerships (84, 86, 93, 94). The tobacco industry is also well aware that a partnership with environmental organisations promotes a “feel good” attitude amongst smokers and company employees, who now have a reason to be depicted in a positive way (94).

Regarding cigarette butt litter, the tobacco industry has been concerned for at least twenty years about tobacco control advocates using the issue to restrict or regulate tobacco sales or use (84, 87, 93-95). It is known that the costs associated with directly cleaning up cigarette butts are tremendous (93), therefore “any regulatory threats of manufacturer responsibility for

the clean-up of butts could result in increased prices of cigarettes” (79). The industry's immediate solution was to shift the responsibility of butt litter onto the back of smokers.

Tobacco industry advocates have also argued that clean indoor air laws which drove smokers outside, combined with the lack of outdoor ashtrays “force” smokers to litter (67, 69, 70, 75, 87). It was soon realised by the tobacco industry that this problem is unlikely to be solved through improving individual smoker behaviour alone (79, 87). For this reason the industry has partnered up with anti-litter NGOs like ‘Keep [your country] Beautiful’ and the BLT. Through these organisations the tobacco industry funds numerous anti-litter initiatives. Chapman, 2006 noted that the partnered anti-litter organisations limit their efforts to community education about butt disposal and the installation of cigarette butt receptacles (84). They do not join other organisations in trying to reduce the number of cigarettes smoked, neither do they lobby for higher taxes on cigarette products, or for tougher fines for littering which would be far more effective in reducing cigarette related litter (84). Instead they appear to manage the problem (as opposed to solving it), and some would argue that these organisations potentially exacerbate the problem. For example, the BLT has opposed moves to ban smoking outside al fresco restaurants and cafés (70, 96). They state that by moving smokers outdoors the number of inappropriately discarded butts would increase. In reality, “the wider view would be that reduced smoking opportunities means reduced smoking”, and thus less overall cigarette related litter (84).

The approach adopted by some anti-litter organisations is likely to be due to the tobacco industry being their main sponsor. It is the tobacco industry who stands to lose financially if people are educated and encouraged to stop smoking.

Thus, “[receivers] of funds are warned that all communication with the public must adhere to the Trust’s key messages, with all public statements being vetted for ‘consistency in messages’. Don’t even think about urging smokers to quit.” The focus is clearly on the issue of litter instead of the effects of smoking (84).

1.6.3.2 *The Tobacco Industry Portraying Itself as a Responsible Corporate Entity*

Tobacco companies are interested in communicating to the public an image of good corporate citizenship (71, 76, 81, 82). Industry documents show that tobacco companies have developed initiatives aimed at restoring their credibility, and achieving a more favourable

public and policymaker opinion (50, 97-99). The tobacco companies highlight the progress of their “Corporate Social Responsibility journey” towards a cleaner environment and their “dedication to contributing positively to the community” (71).

Support for environmental groups, as part of the tobacco industry’s CSR strategy, can be “*used to argue against the need for governments to introduce tougher environmental and social standards*”, as tobacco companies can claim that they are “*already taking steps to improve their practices*” (83).

McDaniel et al, 2006 suggests that “*these types of outreach threaten to undermine de-legitimisation messages and suggest to the public, market analysts, and policymakers that tobacco companies have genuinely changed and are worthy partners in public health*” (95). This results in tobacco companies “*depict[ing] themselves as part of the solution rather than the problem*” (83).

Environmental and public health advocates believe this targeted strategy, to convince the public of its good intentions, will shift the focus from any discussions concerning the implementation of various regulations on the tobacco industry (100). For example, in 2007 BAT NZ directly funded an award at the “Packaging Council’s environmental awards”, in an effort to shift the focus from smoking associated problems to its increased involvement in reducing cigarette related litter (101). Industry documents note that by being “environmentally conscious” tobacco companies’ can generate a positive public opinion which in turn counteracts the de-normalisation of smoking. This strategy will also minimise public backlash against the increasing problem of cigarette related litter (102).

Thomson, 2005 suggested that by using themes, for example: good works, a stance against youth smoking and social responsibility activities, tobacco companies can build and maintain credibility. This creates an opportunity to build contacts and networks in the community and in local and central government (103). Through these contacts, or front people, the tobacco companies “can blunt company image problems” and continue with business as usual (103). It is the concern of many anti-tobacco advocates that the general public and local councils may not be aware that they are being drawn into what they believe is a tobacco industry’s public relations exercise (104). For this reason, in Australia, tobacco control advocates are alerting local government authorities to the broader agenda of tobacco industry sponsored anti-litter campaigns (84).

1.6.3.3 *The Tobacco Industry using Anti-Litter Campaigns to Promote /Advertise Its Product*

The specially designed litter receptacles and the portable ashtray which are funded and distributed by various tobacco companies, and their associated anti-litter organisations, are sources of potential advertising. Despite the fact that tobacco advertising has been banned in most countries since the 1990's, many of these receptacles and ashtrays are still branded with the tobacco companies' name or in some cases the cigarette name (105-107). In Japan, the Japanese Tobacco company has created a Mobile Ashtray Museum (MAM). MAM is an "emporium selling a selection of more than three hundred portable ashtrays...", most tobacco branded, "...along with lighters, cigarette cases and the full range of Japanese Tobacco-made cigarettes" (108). Japanese Tobacco also funds anti-litter organisations who recruit volunteers, wearing tobacco branded clothing, to collect discarded cigarette butts whilst handing out tobacco branded packets of tissues (107). In both instances the tobacco companies argue that this is not a form of advertisement but a means to reduce cigarette butt litter. Regarding portable ashtrays, tobacco companies state that "protecting the environment is the primary communication of the symbol on the ashtrays" (106).

Health researchers would argue instead that this is a direct form of advertising which is being "masked" as an environmental effort to reduce cigarette butt litter. It also spreads an implicit message that smoking is acceptable as long as you do not litter – normalising smoking in society. Additionally, it is well documented that tobacco advertising increases cigarette consumption and there is vast empirical literature that finds a significant effect of tobacco advertising on smoking, especially in children (109-111).

Table 3: Summary on the tobacco industry and anti-litter groups

The Tobacco Industry and Anti-Litter Groups
<ul style="list-style-type: none"> • As part of their anti cigarette butt litter strategies, the tobacco industry funds environmental organisations such as "Keep [your country] Beautiful", established the Butt Littering Trust (in Australia) and communicates butt litter prevention messages directly to consumers • Keep New Zealand Beautiful's current litter reduction campaign targets cigarette butt litter, and involves promoting the installation of butt receptacles to councils, businesses and other institutions. • The public health sector sees the tobacco industry's involvement with anti-litter organisations as an exercise to create respectability by association, drown out calls for regulations, and depict themselves as part of the solution rather than the problem

- It is argued that the motives behind the tobacco industry's involvement in anti-cigarette butt litter strategies are to minimise public backlash against the problem of cigarette related litter, argue against introduction of tougher regulations, and to normalise smoking as acceptable behaviour

1.7 Case in Point: Keep New Zealand Beautiful, British American Tobacco, and Related Organisations

We searched the BAT, BATNZ, KNZB and Smokin' Station websites both by simple browsing and by using the Google search engine to scan each site individually. Our Google search queries included "litter", "butts", "filters", "tobacco", "BAT", "British American Tobacco", "Keep New Zealand Beautiful", "KNZB", "Smokin' Station" and "biodegradable". When Google returned search results that were no longer active URLs (as occurred for a number of KNZB websites), we used Google's cache to access archived content and saved copies of these websites.

The Keep New Zealand Beautiful Trust (KNZB) was established under Section 4 of the Litter Act 1979, as "the body primarily responsible for the promotion of litter control in New Zealand"(45). It is a not-for-profit charitable trust, with a board of thirteen members (including regional and industry representatives) and a member and volunteer body comprised of individuals, corporates, schools, community groups and Councils (112).

Since its inception in 1978 (112), KNZB has run a number of high-profile campaigns such as 'Do the Right Thing', 'Be A Tidy Kiwi', an annual 'Clean-Up Week' and Best Towns and Cities awards (112).

1.7.1 Documental Information from British American Tobacco New Zealand

British American Tobacco New Zealand (BATNZ) first began discussions with KNZB in 2004 (74), since which time BATNZ has provided financial support to KNZB and has occasionally contributed staff as industry representatives on the KNZB Board.

The developments over time are reported by BATNZ in its 2-yearly Social Reports and Scorecards – through which it reports its corporate social responsibility projects. BATNZ's first such publication, its 2002-3 Social Report, describes an interest in finding a practical solution to the litter issue (113). The report states that BATNZ believes in:

“...[a] holistic littering reduction strategy which addresses all of the factors that contribute to littering and takes into account the varying concerns of disparate environmental stakeholders” (113)

and that:

“...[t]he best approach to eliminating littering is through a shared responsibility approach, involving... environmental non-governmental organisations, government bodies, the tobacco industry and consumers” (113)

In its 2004 Scorecard, BATNZ reports that it had began discussions with KNZB regarding a partnership in litter reduction (74). It also mentions holding discussions with two other organisations, Clean Up New Zealand and the Packaging Council of New Zealand:

“In early 2004, company representatives held discussions with Clean Up New Zealand. However, since this organisation no longer exists, we are currently engaging Keep New Zealand Beautiful and the Packaging Council of New Zealand to discuss opportunities for cooperation to reduce littering in New Zealand” (74)

The BATNZ-KNZB relationship was confirmed in early 2005, when its first financial donation was made (114). In its Social Report for that year, BATNZ described that *“we have also engaged in a range of discussions towards developing an educational campaign and supporting infrastructure enhancements throughout New Zealand.” (114)*

In its 2006 Scorecard, BATNZ listed continued support for KNZB in its key commitments (115). The last such document available, the 2007 Social Report, states:

“During 2006 and 2007 BAT New Zealand has contributed financially towards KNZB’s Butt Litter Toolkit.... Not only is BAT New Zealand’s association with KNZB fully compatible with its corporate social responsibility objectives, but it also serves as an important medium for BAT New Zealand to address the issue of cigarette litter.” (116)

The 2007 Social Report also provides some description of the KNZB campaign, including the involvement of Smokin’ Station:

“KNZB, in partnership with Smokin’ Station, developed and distributed the Butt Litter Toolkit, aimed at business owners wanting to clear up the cigarette butt litter that gathers at building and workplace entrances, to councils and businesses throughout New Zealand backed by an advertising campaign in trade publications. Further education and promotional campaigns on issues of butt litter were carried out to businesses, communities, business associations, councils, tertiary education facilities and tourism facilities by Smokin’ Station.” (116)

At the time of writing of this report, BATNZ had not released a Social Report or Scorecard for 2008.

1.7.2 Board Members

Keep New Zealand Beautiful’s Board currently includes four industry representative roles, none of which are currently filled by a tobacco company representative (117). In 2005 however, Josh Goldberg of BATNZ was an industry representative on the KNZB board; he was later replaced by Nick Booth, again of BATNZ (118-120).

1.7.3 Financial Contributions by BATNZ to KNZB

British American Tobacco New Zealand made its first donation of \$25,000 to KNZB in 2005 (114). According to KNZB’s financial report for that financial year, their total donations received were \$61,830 (121).

In the 2007/2008 financial year, BATNZ contributed \$500 under the heading of Donations Administration (total Donations administration \$2,153) and \$100,000 in sponsorship (total sponsorship from all organisations \$185,300), making it the largest corporate donor that year (122).

British American Tobacco New Zealand reported that it has provided financial contributions towards the Butt Litter Toolkit project in 2006-2007 (116). At the time of writing financial contributions were not available for 2008/2009 financial year.

The Campaign against Foreign Control of Aotearoa (CAFCA) and General Agreement on Tariffs and Trade Watchdog (GATT Watchdog) awarded BATNZ the 2008 ‘Roger Award’ for the “Worst Transnational Corporation Operating in Aotearoa”. The accompanying report states that to date, BATNZ had donated \$300,000 to KNZB (100). A joint letter from Action

on Smoking and Health (ASH) and The Cancer Society to councils in New Zealand also mentions the figure of \$300,000 being donated to KNZB by BATNZ (123).

1.7.4 How Well-Known is the BATNZ-KNZB Relationship?

The KNZB website lists nine sponsors: the Ministry of Justice, Ministry for the Environment, Resene, Bunnings, Foodstuffs, McDonalds, Coca-Cola Amatil, the New Zealand Tourism Board (Tourism New Zealand) and Ontrack (124). BATNZ does not feature on this list of sponsors (in keeping with legislation which bans any promotion).

Neither KNZB's website, nor the Toolkit (Appendix Two), which has been distributed to councils and businesses, mention any tobacco industry funding of the Cigarette Butt Litter project (125).

At present there is no mention of BATNZ name on the KNZB website (as of 8 July 2009). However a 2007 study found that the KNZB website contained several references to BATNZ as a "sponsor" (120). This study also described other opportunities for good publicity and networking within government circles provided by this relationship, though these pages have since been removed from the website. Examples include:

1. A KNZB magazine article by then-Board member Nick Booth of BATNZ, in which he describes "the success of the organisation was apparent before the speeches began, one only needed to look about the room and see the cross section of support that KNZB engenders – representatives from every zone and a great deal of the programs, members of Parliament, her worship the Mayor [Kerry Prendergast], Ministry officials, business owners and countless others. One couldn't help but be buoyed by the enthusiasm on show" (126).
2. A number of photos of BATNZ staff participating in the KNZB annual 'Clean Up New Zealand' Week in 2006 "with gusto" (120, 127).

Both BATNZ and Imperial Tobacco were previously listed amongst 26 others on a 'Corporate members' page on the KNZB website (128). This page has since been removed, along with much of the website's content such as its News archives, list of individual members and annual reports.

1.7.5 The KNZB and Smokin' Station Relationship

Smokin' Station is a New Zealand manufacturer of cigarette butt receptacles. The company director is Simon Johnston, who is also CEO of Keep New Zealand Beautiful (KNZB). In a press release from December 2006, the company describes itself as:

'...[T]he only New Zealand company that offers a total outdoor smokers' service, providing heavy-duty stainless steel ashtrays and a regular emptying and cleaning service.' (129)

The company website, although no longer available at the time of writing, contained information on global smoking prevalence and stated that cigarette butt litter is an increasing problem in New Zealand (130, 131). The toxic nature of cigarette filters and their negative effects on the environment were discussed (132).

Smokin' Station is not listed as a sponsor of KNZB(124), but does donate to it a percentage of its sales (130). Smokin' Station's website also mentioned that it is "assisting in the membership drive for corporate and personal members to assist with the funding of the organisation [KNZB]" (130), though the nature of this assistance is not made clear.

The KNZB Cigarette Butt Litter Toolkit) also mentions Smokin' Station. The first reference, in the Introduction section, implies a collaborative role in the project: "*Partnering with Smokin' Station, KNZB has identified a ready to use solution that can be adopted to any area*" (125). The toolkit also contains a template press release for use by Councils who have implemented the KNZB butt litter campaign, which includes the paragraph "*The outdoor manufacturer 'Smokin' Station' provided the (...) number of units around (location) that will be regularly emptied, cleaned and serviced.*" (125)

As mentioned in section 1.7.1, BATNZ also implied that Smokin' Station has a collaborative role in the project, stating that "*KNZB, in partnership with Smokin' Station, developed and distributed the Butt Litter Toolkit....Further education and promotional campaigns on issues of butt litter were carried out to businesses, communities, business associations, councils, tertiary education facilities and tourism facilities by Smokin' Station.*"(116)

Simon Johnston is both CEO of KNZB and director of Smokin' Station, though neither website mentions this shared leadership (130, 133). He took over from Barry Lucinsky as KNZB CEO in 2008 (129). The press release put out by KNZB regarding this does not

explicitly mention his role as Director of Smokin' Station, but does provide some background description on Mr. Johnston as a *“successful businessman with management experience built up from his corporate background. He brings to the role astute awareness of environmental concerns and the importance of working with multiple stakeholder groups including Government agencies”*(129).

Simon Johnston's dual roles were described as a “conflict of interest” by the Cancer Society and ASH in their letter to New Zealand councils (123).

1.7.6 The Views of BAT, KNZB and Smokin' Station on Cigarette Litter

Keep New Zealand Beautiful has repeatedly stated that butt litter has increased as a result of the Smoke-Free Environments Act in 2004 that banned indoor smoking (125, 133, 134). It believes that the solution lies in improving personal responsibility when it comes to disposing of butts, and aims to facilitate this by the availability and promotion of appropriate receptacles in outdoor areas (125).

Similarly, Smokin' Station states that laws banning indoor smoking increase litter “dramatically” (131, 135) and that local bodies and central government should provide and promote infrastructure to allow smokers to dispose of butts (135).

There are variations in the websites of KNZB, BAT and Smokin' Station of what cigarette butts are made of and whether or not they are biodegradable.

The following extracts are from the BAT (International) website:

“The cellulose acetate tow in a filter is a web of fibres made from wood pulp.” (136)

and:

“The filter is made mainly from cellulose acetate fibres, known as tow. Cellulose acetate is derived from wood pulp. The fibres are bonded together with a hardening agent, triacetin plasticizer, which helps the filter to keep its shape. The filter is wrapped in paper and sealed with a line of adhesive. Sometimes charcoal is added to filters.” (137)

and:

“Our filter tips are biodegradable over a period of between a month and three years, depending on environmental conditions.” (137)

A similar description is found on the ‘Q&A’ section on KNZB’s website and in the KNZB Cigarette Butt Litter Toolkit:

Q: *What are cigarette butts actually made from?*

A: *Most are from cellulose acetate, a form of treated wood pulp, surrounded by paper.*

Q: *Do cigarette butts biodegrade?*

A: *Yes - depending on the environmental conditions - within a period of between one or two months (i.e. in soil and water) and three years.” (125, 133)*

However, this description is at odds with what is found on the Smokin’ Station website:

“cigarette filters are made of cellulose acetate tow, not cotton, and they can take decades to degrade” (132)

and:

“There is a lot of misinformation out there regarding cigarette butt litter. The biggest myth is the cigarette filters are biodegradable. In fact, cigarette butts are not biodegradable in the sense that most people think of the word. The acetate (plastic) filters can take many years to decompose” (135)

1.7.7 Environmental Awards

One way that tobacco companies are involved in broader environmental issues in New Zealand is via the sponsorship, and receiving of, environmental awards. The BAT (International) website advertises that BATNZ won a “‘Keep New Zealand Beautiful Excellence Award’ for its environmental contributions” in 2006 (138) – however neither the KNZB website nor the BATNZ Social Reports or Scorecards make any mention of this award.

In 2005, BATNZ sponsored a two-yearly environmental award given by the Packaging Council (the British American Tobacco (NZ) Ltd Award for Packaging Systems)(139). The Packaging Council is a voluntary organisation that markets itself as “the industry’s voice on

policies affecting packaging and packaging waste” (140). The award provided more publicity for BATNZ with the Packaging Council publishing photos with the award winners and runners up, BATNZ staff members and the award presenter, then-Environment minister Marian Hobbs (139). Keep New Zealand Beautiful took over funding of this award in 2007 (141). The 2009 Packaging Council awards webpage lists KNZB (but not BATNZ) as a sponsor (142).

Table 4: Summary of case in point

Case in Point: Keep New Zealand Beautiful (KNZB), British American Tobacco (BAT), and Related Organisations
<ul style="list-style-type: none"> • KNZB runs a cigarette butt litter reduction campaign in NZ • This programme is funded in part by BATNZ • BATNZ has contributed staff to the KNZB Board of Trustees in the past • Smokin’ Station is a manufacturer of cigarette butts receptacles and is KNZB’s preferred supplier

Chapter Two Methods

The methods used to obtain data for the four different arms of this report are described in detail below.

Ethical approval for the Study was obtained from the University of Otago Human Ethics Committee through the Category B, Departmental Procedure. A complete description of the Study was sent to potential participants prior to surveys and interviews. Additionally, written informed consent was obtained before each interview. Structured questionnaires ensured adherence to protocol.

2.1 Survey of Environmental Organisations

A short survey of ten questions (comprising multiple choice and short answer questions) was written based on our needs (see Appendix Three:). The questions addressed the perceived effects of cigarette butt litter on various aspects of New Zealand environment and society, as well as ways this could be potentially improved. The survey was to be self-completed by environmental organisations.

Online directories were used to create a sampling frame of potential environmental organisations. These were Green Pages, IndexNZ and Yellow Pages. An inclusion criterion was then created in order to choose a cohort of environmental organisations, refer to Table 5 below. The idea of these inclusion criteria was to target organisations that would have potentially addressed the issue of cigarette butt litter.

Table 5: Inclusion criteria for environmental organisations

1	Agency/group must operate nationally
2	Agency/group must be described as having a focus on litter, waste, pollution, or toxins, <i>and</i> conservation or environment
3	Agency/group must be action focussed rather than education focussed
4	Agency/group must not be involved in parliament

In total seventeen organisations were found using the above criteria. These organisations were contacted by phone, and we were able to speak to a suitable representative to discuss our

project aims at ten of them. Seven organisations subsequently consented to be emailed the project information sheet and survey. The three organisations that declined to take part, cited as their reason either a large work load, or little to no knowledge of the subject.

Phone calls were made, twice more, to the seven organisations that initially could not be contacted. If contact was still not achieved, the information sheet and survey was sent via email addresses provided on the organisations websites. One of these email addresses was no longer active.

Over the course of the next two weeks responses were received from four organisations. Organisations that had not responded were also offered a phone interview at this stage but none opted for this. Data from these surveys are presented in Study One below.

2.2 Systematic Review on Cigarette Litter Interventions

A review of the English language literature was conducted using Medline and ISI Web of Science databases using combinations of the following keywords: smoking, cigarette, tobacco, butt, litter, rubbish, bins and interventions. Secondary references were retrieved from article bibliographies. A Cochrane Library search was performed using the terms cigarette butt litter and interventions. A search of Google Scholar using the term “cigarette litter interventions” restricted to the first 200 hits was also conducted. The articles included had to be either interventional studies looking at litter clean-up methods and their effectiveness, or reports reviewing the effects of litter receptacles.

2.3 Survey/Interview of Local Councils

A list of councils from the Local Government New Zealand website was obtained (143). Of the 85 local authorities, 22 were selected from around New Zealand (see Table 6 below). These district councils were purposefully selected to span a range of characteristics, including both rural and urban areas, different District Health Boards, and with a range of population characteristics - annual income and smoking rates, and people per km². This information was obtained from the 2006 New Zealand census data (144). Wellington and Auckland city councils were included not only for their below-average smoking rates and above average income, but also because KNZB had implemented a cigarette butt litter programme in these cities (Refer to Appendix Two). Councils with known interventions such as fines and pocket ashtrays were also included as well as those with local government funding to target cigarette

litter. A questionnaire was designed (Appendix Three) and relevant staff members, such as environmental officers, were contacted at each council. If the staff member agreed to take part in the project, an information sheet and consent form was sent and was subsequently signed and returned. The questionnaire was then filled out and returned or a structured phone interview was conducted with the same questions. Phone interviews were recorded to ensure data accuracy. This survey-interview method was used in order to increase convenience for the staff member concerned and thus increase our response rate. These data are presented in Study Three below.

2.4 Stakeholder Interviews

Phone interviews were requested with representatives of Action on Smoking and Health (ASH), British American Tobacco (BAT) NZ and Keep New Zealand Beautiful (KNZB). All interviews were recorded to ensure data accuracy and a written transcript was then sent to the interviewee to make sure that they had not been misrepresented.

Themes that were discussed included:

1. The extent of cigarette litter in New Zealand
2. The effect of the Smoke-Free Environments Act on cigarette litter
3. Possible effective interventions, including cigarette butt bins
4. Does increased cigarette butt litter strengthen calls for outdoor smoking restrictions
5. The BAT-KNZB partnership
6. How are sponsors chosen by KNZB
7. What constitutes responsible behaviour by the tobacco industry
8. The role of Smokin' Station
9. Anything else that the representative feels is worth discussing

Data from these interviews are presented in Study Four.

Table 6: Local authorities in the sample frame, showing a range of characteristics

Council	DHB	Prevalence of regular smokers by DHB (%)	People per km²	Median annual income (\$)
Auckland City	Auckland	16.5	605.3	28100
Opotiki District	Bay of Plenty	22.3	2.9	17400
Christchurch City	Canterbury	18.8	216.4	23400
Wellington City	Capital and Coast	17.3	618.5	32500
Hastings District	Hawkes Bay	24.8	13.6	22600
Hutt City	Hutt	22.9	259.4	27600
Taupo District	Lakes	27.2	4.7	24500
Dunedin City	Otago	19.4	35.5	19400
Queenstown-Lakes District	Southland	23.8	2.5	31000
Gisborne District	Tairāwhiti	29.7	5.3	20600
New Plymouth District	Taranaki	22.4	31.2	22800
Masterton District	Wairarapa	23.5	9.8	21700
Buller District	West Coast	25.7	1.2	18000
Hamilton City	Waikato	22.6	1311.5	24000
Hauraki District	Waikato	22.6	14.5	19600
Rotorua District	Waikato	22.6	25.2	23900
Waitomo District	Waikato	22.6	2.7	23300
Southland District	Southland	23.8	0.9	25800
Whangarei District	Northland	25.7	26.1	22500
Whakatane District	Bay of Plenty	22.3	7.5	21700
Kaikoura District	Canterbury	18.8	1.8	21800
Marlborough District	Nelson Marlborough	19.3	3.4	23300
New Zealand		20.7%	9.7	24,400

Chapter Three

Study One: Environmental Organisations

The overall impression from the four organisations who responded to the survey was varied. Three agreed that cigarette butt litter was a significant issue for their organisation, and the reasons that were “very significant” were the negative implications of environmental damage and unsightliness (see Figure 1 below). Other negative effects suggested by the organisations (not included in the multiple choice options we provided) were the residual effects of non biodegradable rubbish persisting in the marine environment, the disintegration of butts, and the chemicals within the butts.

One of the four agencies had conducted research regarding cigarette butt litter in New Zealand, and they reported that cigarette butts were the numerically dominant beach litter during a cleanup of the Wellington waterfront, in March 2008.

Another group described an initiative they have in place specifically targeting cigarette butt litter:

“We have worked with 2 companies to erect outdoor butt collection containers in places where people congregate to smoke outside. The smoking outside habit caused by the law change has meant more butts appear to be discarded into the environment.”

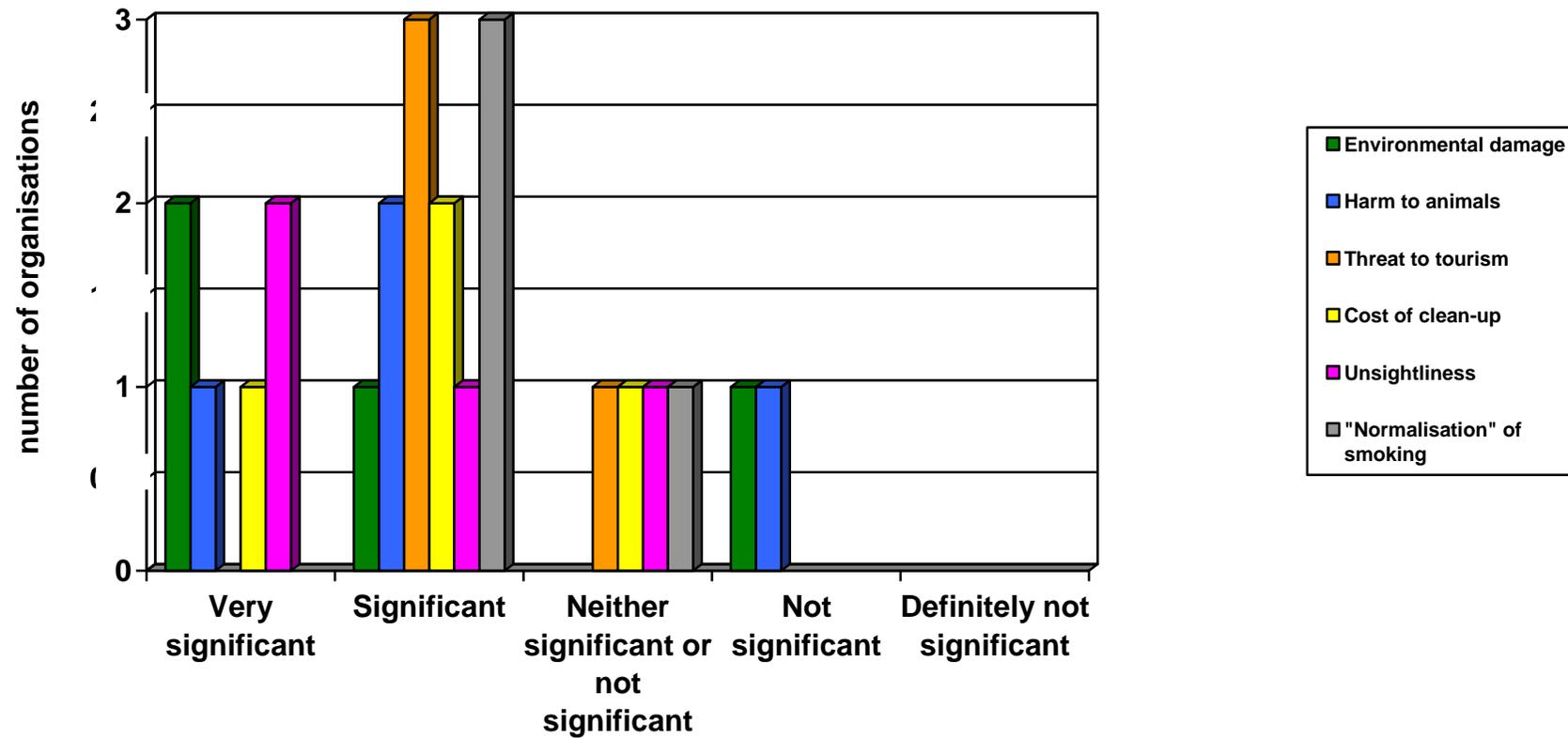
Two other groups said that they have initiatives that help reduce cigarette butt litter, but not specifically targeting cigarette butts:

“We support zero rubbish disposal and encourage community activity for composting and recycling etc. We endorse promotion of “Clean, Green NZ” and litter of these items (cigarettes etc) undermine this image.”

“Part of our campaign to save Hector’s and Maui’s dolphins is educating people about the harmful effects of rubbish in the sea. Specifically, we teach children about how rubbish in the ground ends up in storm drains which then takes rubbish to the sea. We also recently contributed to the marine-debris forum meeting.”

Figure 1: Environmental Organisations' Opinions of the Impact of Cigarette Litter

Environmental Organisations' Opinions of the Impact of Cigarette Litter



When asked to rank some possible solutions to the cigarette butt litter problem (see Appendix Three) the organisations differed greatly on their answers, with the different rankings and rationale shown below:

Organisation One - Ranked all six possible solutions, top three presented below

1. Increased policing/enforcing of litter laws / Smoke-free downtown areas

Rationale: "The example shown in other countries such as Singapore. (policing litter laws with fines.) The more smoke free areas the greater emphasis given to addicts to not smoke. It also alleviates litter of environmentally sensitive areas"

2. Campaigns targeted at smokers encouraging them to stop littering.

3. "Butt bins" regularly spaced on streets / Targeted cigarette waste removal by staff, machines, programmes etc / Free "pocket ashtrays" (film canisters or similar) for smokers.

Rationale: "Who pays for these services? City councils are under pressure to keep rating levels down. The pressure on individual addicts is not direct and these provisions remove individual accountability and responsibility"

Organisation Two – Ranked three possible solutions

1. Smoke-free downtown areas

2. Campaigns targeted at smokers encouraging them to stop littering

3. Increased policing/enforcing of litter laws

Organisation Three – Ranked all six possible solutions

1. Increased policing/enforcing of litter laws

Rationale: "It is illegal to litter but seems socially acceptable to throw butts on the ground. Some regulation and enforcement would hopefully motivate behaviour change."

2. Campaigns targeted at smokers encouraging them to stop littering

3. “Butt bins” regularly spaced on streets
4. Free “pocket ashtrays” (film canisters or similar) for smokers.
5. Targeted cigarette waste removal by staff, machines, programmes etc
6. Smoke-free downtown areas

Rationale: “Establishments such as pubs, clubs etc would most likely suffer if downtown areas were to be smoke free.”

Organisation Four – Ranked four possible solutions

1. Smoke-free downtown areas

Rationale: “Raises awareness and is now instituted in some NZ cities.”

2. Campaigns targeted at smokers encouraging them to stop littering

Rationale: “Education holds the key.”

3. “Butt bins” regularly spaced on streets

4. Free “pocket ashtrays” (film canisters or similar) for smokers.

Rationale: “Cleaning up is very expensive and increased policing also. Street butt containers need better maintenance and cleaning and more regular emptying. They are often full and filthy.”

Three of the organisations described a trend in butt litter which they had recognised over the last ten years. These were: *“There are often butts left on street outside hotels and restaurants but there are trends in some areas where smokers can dispose of their butts, matches etc in located bins provided.”* *“Personal observation is less litter (due to) reduced smoking in general.”* And *“More butts outside, and also more butts outside in containers that spread ash and butts around if caught in the wind, (due to) change in law.”*

Three groups agreed that the Smoke-free Environments Act had increased the amount of cigarette butt litter on the streets. The fourth organisation said the Act had decreased the

amount of cigarette butt litter on the streets, but commented that this was a personal view, not that of their organisation.

All four agencies said that they were not associated with the tobacco industry in any way.

Chapter Four

Study Two: Systematic Review of Cigarette Litter Interventions

Only four studies were found that examined cigarette litter interventions, two interventional litter studies and two government reports from Victoria, Australia (Table 7 and Table 8). Many studies had been carried out on various methods to reduce the act of both smoking and littering of general rubbish, however valid research on specifically cigarette litter was scarce. Other excluded results included design patents for novel litter and packaging products, and studies that looked at environmental impact of tobacco waste (as this was covered in the Study One above).

The first included article was a psychology study carried out in Victoria University, Wellington (Table 7) which looked at the behaviours involved in littering, and whether or not anti-littering signs and waste receptacles were effective in altering this behaviour (145). The study analysed cigarette litter separately from other types of litter, which was why it was particularly relevant. The introduction of litter bins and ashtrays significantly reduced cigarette litter.

The second interventional study (Table 7) was carried out in Hobart Central Business District, Australia, and looked at Hobart's current "Cigarette Butt Litter Reduction Project" and its progress in tackling the city's litter problem (146). The authors of this study state that ashtrays are suitable disposal devices when placed in prominent locations. Note that this study was indirectly funded by British American Tobacco.

The Victoria Litter Protocol Monitoring Pilot Test (147) used a similar technique to the Hobart study in assessing the litter problem in Victoria, and came to the same conclusion as the City of Melbourne report (148). The reports state that while cigarette butt-bins are successful in reducing the number of cigarette butts that are littered, the location of the bins is more important than the presence of a bin itself (see Table 8). This is explained due to the fact the smokers tend to congregate in particular areas when they smoke outdoors, and if there is not a butt-bin in this vicinity they will litter their butts, rather than going out of their way to find a bin elsewhere. Smokers were more likely to deposit their butts into specialised butt receptacles over conventional rubbish bins, provided they were in appropriate locations.

Table 7: Intervention studies examining cigarette litter

Study	Location	Purpose	Method	Results	Comments
Attitudes And Behaviours In Social Space (145)	Victoria University central quad, Wellington, New Zealand	Two part study looking at littering behaviour (part one) and whether it is influenced by social prompts, such as litter bins (part two)	735 people with potential litter were observed (325 with cigarettes, 410 with other litter) and littering behaviour noted prior to the intervention. Two additional litter bins and 15 ashtrays were added to the University quad and littering was observed following this intervention. Surveys on attitudes were also carried out.	The introduction of additional litter bins and ashtrays significantly reduced cigarette litter by 64.3% ($X^2(1,180) = 74.44, p < 0.001$). It reduced non-cigarette littering by a statistically non-significant 7.2% ($X^2(1,231) = 2.04, p = 0.15$). However the authors report that this was a floor effect as littering already approached minimal levels and could not therefore be reduced much lower.	Very relevant to Wellington as based on Victoria University campus. More emphasis was placed on all types of litter, rather than tobacco litter separately, however cigarette butt litter was observed and recorded separately so the results of this study are relevant to the review
Cigarette Butt Litter Reduction Project For Hobart's Central Business District (CBD) (146)	Thirteen public locations around Hobart CBD, Tasmania, Australia	Looks at 4 aspects of Hobart's "Cigarette Butt Litter Reduction Project" and whether there has been sufficient data gathered to make initial assessments.	Hobart CBD was divided into 13 areas; three areas were fitted out with post-mounted ashtrays and butt bins. "Clean Communities Assessment Tool" (CCAT) and "Cigarette Litter Action Scores" (CLAS) were established to measure littering behaviour and location cleanliness. Butt litter counts were also performed at each site, and within intervention bins/ashtrays	Locations with post/wall mounted ashtrays were in the top six locations with high CCAT scores, and 2/3 of locations had high CLAS positive scores. Suggests ashtrays are suitable disposal devices provided they are in a visible/prominent location. Butt litter counts provided less reliable data compared to observations of littering behaviour, as environmental factors and characteristics of individual sites biased butt litter counts. Likewise butt counts in ashtrays and bins were unreliable as many butts burnt to ash within the units and some units were opened up and scavenged for their contents.	Few references are made to other studies (none cited within the text). Measurement techniques (CCAT and CLAS) difficult to interpret. Supported by the Butt Littering Trust, which receives funding from British American Tobacco.

Table 8: Governmental reports examining cigarette litter interventions

Study	Location	Purpose	Findings	Comments
Victorian Litter Monitoring Protocol (147)	Sixteen local government areas from Melbourne Statistical District were assessed.	Information provided for Victorian Litter Action Alliance (VLAA) on litter management and strategic approaches to long term litter reduction. Reports on the Victoria Litter Monitoring Protocol initiated by EcoRecycle Victoria.	Butt bins have become increasingly common in public areas. Smokers are increasingly more likely to use butt bins than previous reports have shown. Butt bins tend not to work in reducing litter when placed in an inappropriate location, or are not placed in areas where smokers congregate.	Offers recommendations and advice as to how the report's findings can be applied to improve litter reduction methods in Victorian communities
Improving Disposal Behaviour. Melbourne, Community Change (148)	Locations throughout the city of Melbourne	Litter is seen as a significant problem in the Melbourne central business district. The National Packaging Covenant through the Victoria Jurisdiction Recycling Group provided funding for a report looking at littering behaviour and current strategies in place to tackle litter.	Reports on overall environmentally responsible attitude people in Melbourne have towards littering. Smokers have responded well to butt bins, with smokers now less likely to litter their butts. Suggests ashtrays must be provided in areas where smokers congregate, and ashtrays must be cleaned out/serviced regularly to maintain litter-free clean environments. Stresses the importance of location of litter bins, for both tobacco and other forms of litter	Offers further suggestions to help tackle litter problem, such as implementing stronger litter fines, however the report does not recommend that these fines come into practice until more litter-bin infrastructure has been put in place around the city.

Chapter Five

Study Three: Local Councils

5.1 Responders

Of the twenty two councils that we approached, ten replied to our survey.

The demographics of the responding councils are presented in Table 9 below.

Table 9: Demographics of councils that responded

Council and Employee Position	Reply Method	Size of Population¹	Area	Average Income²
1: Property and Reserve Officer	Phone Interview	Small	Rural	Below Average
2: Team Leader of Policy Development	Phone Interview	Large	Urban	Below Average
3: Environmental Health Educator	Written Survey	Medium	Urban	Below Average
4: Environmental Enhancement Officer	Phone Interview	Medium	Urban	Below Average
5: Environmental Investigations Officer	Written Survey	Medium	Urban	Above Average
6: District Planner	Written Survey	Small	Tourist Town	Below Average
7: Horticultural Team Leader	Phone Interview	Small	Tourist Town	Above Average
8: Parks and Reserves Manager	Written Survey	Small	Rural	Below Average
9: Senior Policy Analyst, Acting Grants Team Leader ³	Written Survey	Large	Urban	Above Average
10: Solid Waste Manager	Written Survey	Medium	Urban	Below Average

¹ Small 0-25,000; Medium 25,000-15,000; Large >150,000 – exact populations withheld to retain anonymity

² ‘Average income’ refers to average income for NZ taken from the 2006 census (144).

³ Both positions held by same person

Seven councils were below average income compared with 3 above average income. Two were identified as ‘rural’; 6 urban; and 2 others as ‘tourist town’. The populations ranged from under 10,000 to over 250,000.

5.2 Results

The responses of the 10 councils to each question are presented in four tables below – corresponding to four broad themes – and key findings are highlighted in the text. The first section explores each council’s view on the extent and trend of the cigarette related litter problem in their area, as well as its impact. The second section illustrates present or planned policies or interventions to target cigarette litter for each council. The third summarises knowledge and perception of other (proposed and current) interventions to target cigarette litter; and involvement with Keep New Zealand Beautiful (KNZB). The last section explores the councils’ views on tobacco industry involvement in anti-cigarette litter campaigns.

5.2.1 Extent and Impact of the Cigarette Butt Litter Problem

Councils had varying opinions as to the extent and impact of cigarette butt litter in their region. Three councils reported it was not a major issue at all, two reported it was only a problem in some areas, while five reported it to be a major problem.

Three councils reported a perceived decrease in cigarette related litter over the last 10 years, possibly due to an overall decrease in smoking rates. However, since the enforcement of the Smoke-Free Environments Act (SFA) 2004, seven councils reported increased cigarette related litter. This is particularly an issue in outdoor areas and is likely to be directly related to the SFA in forcing smokers outside public indoor buildings to smoke. The increase in the number of bars in the area was also mentioned as a possible reason for the increase by one council.

Nine councils stated that there were particular areas where cigarette related litter is more of a problem than others. Areas of most concern included outside bars and cafes (7/10 councils); main streets with heavy foot traffic, especially in areas close to bars in the central business district (5/10 councils); beaches/lakeside (4/10 councils), gardens/parks (4/10 councils), bus stops (2/10 councils), “areas where youth gather” (2/10 councils), “pockets of low socioeconomic areas” (1/10 councils), “areas with graffiti problems” (1/10 councils) and storm-water drains (2/10 councils).

Four councils reported that a consequence of the cigarette litter problem in their area was reduced aesthetic appeal. One council went as far as to say that in ‘problem areas’ where

cigarette butt litter and graffiti co-occur, the ‘decreased desirability’ of the area meant people were less likely to exercise there, leading to decreased general health of the population. Two councils reported cigarette litter damaged the area’s reputation and resulted in a negative impact on the tourism industry. Two reported environmental consequences including the pollution of storm water drains and waterways. Fires were also cited as an associated negative consequence (2/10 councils).

Table 10: Councils' opinions of the extent and impact of the cigarette butt litter problem

Council	What extent is cigarette litter an issue within your region?	Over the last 10 years, have you noticed trends in the extent of cigarette litter in your region, and what factors have influenced this?	Has the Smoke Free Environmental Act 2004 had an impact on the amount of cigarette litter in your area?	Are there areas of most concern in your area? E.g. beaches, public parks, city streets.	Are there other consequences associated with cigarette litter in your area? (Environmental, tourism, safety, aesthetic social)
1	Not much – the population is too small.	Litter has decreased since Smoke-Free Act. Street cleaners have reported less cigarette butt litter.	Yes.	Main streets, outside pubs especially.	(General) litter fires, for which there is a \$450 fine.
2	Not really a major issue. More annoying than anything.	Litter has decreased in the airport and District Health Board since becoming smoke-free in 2004, but it is still believed the rate of smoking is as high.	Not noticed very much. Restaurants and bars now have own disposal strategies outside. They are responsible for their own area and keep it fairly clean.	Beaches, parks, playgrounds, fields, bus exchanges, outside on pavements. Especially particular streets where youth gather.	Unsure.
3	Doesn't seem too bad – maybe more outside bars.	Decreased.	Yes.	Outside bars and cafes.	-

4	Major problem. We have reactive interventions to general litter, which cost about \$960,000 per year.	More litter outside, increased numbers of bars contributing to problem.	The Act didn't stop many people smoking. Increased outdoor cigarette litter.	Pockets of low socioeconomic areas. Beaches, storm water drains, areas with graffiti problems, outside bars.	Cigarette litter and graffiti seem to coincide in 'problem areas'. Decreased desirability of parks → less exercise.
5	Litter became more prominent around time of act of 2004. Businesses and bars installed receptacles to target litter, but still an issue.	From 2004 noticed an increase in litter, so in 2007 approved litter infringement notices, fines and education programme which led to decrease in litter.	No litter counts carried out, but council workers noticed increased litter around bars and the CBD.	City streets, foreshore, car parks, summer festivals. Most events controlled with litter clearance afterwards.	Aesthetic – looks untidy. Unhealthy for environment, especially the pollution of storm water drains.
6	Yes it is an issue in our region.	Increased on the streets outside hotels and licensed premises.	Yes. Now smokers have to go outside and they end up littering there.	Town streets and outside bars and clubs.	Aesthetic – unsightly mess. Socially, when litter is dropped it infers that smoking is socially acceptable. Environmental pollution of waterways. We are a tourist town so cigarette litter is definitely not desirable in the street.

7	Big problem.	Worse because of increased numbers of tourists (compared to Wanaka, Arrowtown). Increase due to banning of smoking in bars, and also the increase of bars in the area.	Yes – an observed increase in cigarette litter.	Gardens, seating areas, outside bars, lakeside, shopping areas, public parks – basically anywhere where people congregate.	No – have requested for cigarette butt clean ups from residents/business owners.
8	Not a major issue at all.	Smoking is becoming less, but there is a trend of increasing butts outside halls and buildings.	Yes there has been an impact of increased litter, but we have installed butt receptacles outside problem buildings.	Community halls. Not one area in particular.	No.
9	Unsightly and offensive pollution. Although generally happy with street cleaning in this area, does not specifically indicate butt litter.	More smoking outdoors – leading to more careless placement of butts.	Yes – more outdoor smoking.	Bus stops, outdoor ‘dining’ areas, and public parks.	Damage to reputation and visitor perception. Harbour city, butts washed up on beaches.
10	Minor issue relative to litter overall. However, significant in Central Business Zone (CBZ).	Increased in CBZ over last 5 years.	Yes – more cigarette litter in CBZ. ‘Special’ street clean on Thursday, Friday, Saturday and Sunday mornings outside bars and pubs of CBZ.	Litter is left behind in centre of shopping part of town, where youth gather.	Possible occasional fire in summer. No statistics to prove this.

5.2.2 Policies and Interventions Regarding Cigarette Litter

None of the ten councils have specific policies regarding cigarette related litter. Council policies instead concerned litter in general, in keeping with the Litter Act 1979, which is the basis for council litter bylaws in New Zealand (see Table 11).

Two councils admitted that their approach to cigarette related litter is reactive rather than proactive (clean up rather than reduce litter). Four councils mention a fine for littering under the Litter Act 1979. However, all four stated this approach has been unsuccessful, as enforcement is difficult. Two councils had never issued an infringement for cigarette litter despite the fine, while another had issued infringement notices and is employing 30 'waste minimisation officers' over a 10 year period in an attempt to target littering.

Butt bins were used by two councils to reduce cigarette butt litter. One council had "noticed a definite decline in the amount of dropped cigarette litter" so believed butt bins to be successful. The other council believed that more bins are needed in specific targeted areas to be effective.

Other strategies implemented which were less specific to cigarette litter included public education and promotion of clean-up events (2/10 councils).

Two councils wanted to make business owners responsible for cleaning up the cigarette related litter outside their premise. One council had created an Outdoor policy that laid out this expectation for business owners.

No council had any measure or documentation of how successful their intervention had been.

All of the interventions mentioned were funded internally. Environmental education funding did not make up a large proportion of council funds, and cigarette litter was just one aspect of a vast array of issues that councils would like to address in their areas. No councils mentioned any funding for currently implemented strategies by sponsors, donors or external parties.

One council interviewed had very progressive aspirations for tackling this issue, including a 10-year project aiming to increase and revitalise community spirit and respect for local environment, through education and community projects. It was hoped this would impact positively on communities through citizens challenging each other on littering, and taking responsibility for maintaining clean environments. The majority of the councils had no future plans at this stage to address this issue any further. One council was scheduled to review the

general litter bylaws next year and increase bar owner responsibilities to maintain tidy outdoor areas.

Three councils reported help from local volunteer groups to tackle the issue of cigarette related litter. Only one council engaged the local iwi to provide cigarette butt litter strategies.

Six councils did not identify a particular demographic group that they thought would be good to target to reduce cigarette butt litter. Three councils identified the tourist or back packer culture as quite notorious. One council identified Asian communities as more likely to contribute to the cigarette litter issue and one council states school children, youth, adults, environment groups and high risk cancer groups are good to target.

Table 11: Councils' policies and interventions regarding cigarette litter

Council	Current policy or plan relating to cigarette litter	Has your council/group implemented any interventions to specifically target the cigarette litter problem?	How successful have these interventions been?	How were interventions evaluated?	What funding sources are used?	Are there any other interventions you think you might try to implement in the future?	To what extent does the local iwi or other local environment groups provide assistance and support to target the cigarette litter problem?	Do you think anti-cigarette litter initiatives would be more effective targeted towards particular ethnic or demographic groups?
1	None.	None.	-	-	-	-	None.	No.
2	None to do with litter specifically. Although a new policy this year, which implements smoke-free areas in public places, may have an indirect effect on reducing litter.	Not that the interviewee is aware of – other types of litter are more of a problem eg. fast food. Do not actively enforce litter fines.	-	Use of the University of Auckland studies, ASH surveys and the NZ health survey has been used as measures of smoking and 'community spirit'. However, no direct measurement of cigarette litter.	-	-	Volunteer groups – but in programmes not specific for cigarette butt litter. No local iwi involvement.	Observations – Asians smoke a lot, so probably largely contribute to more litter.
3	None specific for cigarette litter, but have a comprehensive litter programme.	No – just for any litter in general.	-	-	-	-	Not known.	Probably.

4	<p>Early on in intervention planning. Mainly Reactive toward litter at present, costing \$960,000.</p> <p>General anti-littering education taught at schools.</p>	<p>Reactive strategy.</p> <p>Fines if directly caught littering under Litter Act 1979. Education at schools. Since September 2008, we have used infringement notices for littering, and have employed 30 waste minimisation officers as part of our 10 year plan to target litter.</p>	<p>Relatively unsuccessful as limited education and intervention. However surveys have shown public agreement for interventions targeting litter.</p>	<p>Not actively measured. We rely on anecdotal evidence from council waste-workers.</p>	<p>Council funded.</p>	<p>Plans to target community spirit, and increase respect for local environment via education and community projects.</p>	<p>None.</p>	<p>Yes. We are finding more teenagers are picking up smoking, and we think intervention to target this would help, but would be very costly.</p>
5	<p>None written. Negotiate with business owners to keep their area tidy. Work with volunteer clean-up groups.</p>	<p>Publicity, information/education, promotions and legislation. Annual clean up weeks, specific clean ups of beaches, competitions, school competitions, graffiti eradication programme, community graffiti paint outs, tree planting.</p>	<p>Difficult to quantify success.</p>	<p>Not measured. Would be interested to see if smokers' attitudes and behaviours have changed.</p>	<p>Budget allocated to the environmental education coordinator, but this has to cover a wide range of issues.</p>	<p>No other interventions. Public places bylaw was reviewed in 2008, but no proposals for smoke-free public places.</p>	<p>Volunteer groups support. No iwi involvement.</p>	<p>Not been considered. Worth discussing at wider level.</p>

6	Encourage licensed premises to look after own area, and clean it according to our Outdoor Dining Policy.	The Outdoor Dining Policy puts the onus on the businesses to ensure their area is kept clean.	-	-	Council funded cleanups.	-	Local iwi through anti- smoking programmes. Environmental groups through pick-up litter days.	Not really. Offending usually occurs late at night – difficult to target as often itinerant visitors.
7	No specific plan – just continue to clean up litter. Would consider butt bins, but then need someone to empty them.	The number of butt bins is increasing, but not enough in targeted areas.	Education difficult because of transient population. Engaging bar owners more successful.	-	Ratepayers.	Tightening up general litter bylaws (under review next year), and increase bar owner responsibility.	Not much to do with either of these groups. Mainly – hospitality, business owners.	Yes - transient young backpacker culture.
8	There is none.	Butt receptacles.	Noticed a definite decline in the amount of dropped cigarette litter, so believe it is fairly successful.	Not been specifically measured or documented.	Community services budget.	No.	None at present.	No, but making smoking less acceptable in the public will help as less people will smoke.

9	Newly revised fines for littering under Litter Act 1979 – which includes cigarette litter.	-Footpath Management Policy requires outdoor seating licensees to clear up own area. -\$100 fine for dropping cigarette butt (litter infringement fines).	-Not working well. Enforcement of litter offences currently targets more serious offences.	-	-	-	Forest & Bird carried out litter audit during ‘Seaweed Beach Clean-Up’, which helped gain attention.	School children, youth, adults, environment groups, high cancer-risk groups.
10	Only general litter infringement policies / procedures.	-	No-one has ever received a litter infringement for cigarette litter.	-	-	-	None.	Not really.

5.2.3 Impressions of Other Interventions to Target Cigarette Litter, and KNZB Involvement

Council impressions of other interventions to target cigarette litter and the involvement of KNZB are reviewed in Table 12 below.

Four councils were unaware of other councils' interventions to target cigarette butt litter. Three councils were aware other councils were using butt bins; two were aware of the personal ash trays given out in Melbourne, and one council mentioned a general education campaign urging people not to put litter down the storm water drain.

As mentioned above, two of the councils were using butt bins. Of these, one council reported the intervention worked, but could work better if the bins were more ideally situated in areas that are most affected. This council had elected not to purchase more bins due to cost. The other council reported the bins to work well when compared with the time taken to clean up litter.

Five of the remaining eight councils thought butt bins were a good idea. Some advantages mentioned include reducing the fire risk of lit cigarettes being disposed in general rubbish bins, and being able to target known problem areas such as outside bars and clubs. One council recommended using general rubbish bins with a metal top for stubbing out cigarettes, which they believe is both practical and convenient, targeting the broader spectrum of litter.

Cost was stated to be the major barrier to setting up a butt bin system. Costs included initial purchase, as well as ongoing maintenance and emptying costs, and were a big factor for four councils.

One council was concerned that butt bins would be seen as encouraging smoking.

Three councils already had smoke-free outdoor areas. However, although signs were present they were not policed or enforced.

Of the remaining seven councils, four had no impressions about smoke-free areas. The other three councils had a positive impression of this approach in terms of reducing the rate of smoking and improving the social environment of the public places as well as reducing the amount of cigarette butt litter.

Six councils used (or have used in the past) Keep New Zealand Beautiful services to reduce cigarette related litter. These included general litter and environmental action programmes in

schools, cleanup projects, graffiti removal, tree planting, stream restoration, and simply purchasing butt bins, litter bags and gloves to use or give away. One council decided not to affiliate with KNZB as the aims of local volunteer groups were much the same and it was decided the fee for becoming a member could be better used at a local level. Another council acknowledged that the KNZB campaign did work well but had also not used them for cost reasons. One council that had not had contact said they would consider becoming involved if there was the right sort of project for their area. The only council to financially support KNZB was also a member of 10 years, and provides \$3000 per annum, coming out of the council budget. This membership covers all projects in the area and not just the litter issue.

Table 12: Councils' impressions of other interventions to target cigarette litter and KNZB involvement

Council	Are you aware of other council's initiatives to reduce cigarette butt litter? Which?	Some councils are considering installing 'butt bins' to tackle the cigarette litter problem. What is your impression of this intervention? What do you think are the advantages and disadvantages?	Another approach is to create smoke-free outdoor areas. What are your impressions / perceptions of these?	Does your council / group work with Keep New Zealand Beautiful (KNZB)? How frequently do you use KNZB services?	Which KNZB programmes have you been involved in?	Do you financially support KNZB for anti-littering programmes (specifically cigarette litter)? If so, how much?
1	Auckland and Wellington.	Good – but would need to consider maintenance / emptying costs.	We have a playground that has a smoke-free sign but the rule is not enforced. Funded by West Coast District Health Board.	No projects with them yet.	None – but would consider becoming involved if it was the right sort of project for our area.	No.
2	Melbourne – personal ash trays. Seems like a good idea which helps to remove risk of fires.	Good idea if people use them – will reduce fires, but don't look very nice. Are currently under discussion but have not implemented them yet.	No disadvantages – We have 540 parks smoke-free, although this is not policed. We did research on this and there was an overwhelming majority of public in favour of smoke-free playgrounds, sports fields and parks. (75% in smokers and 80-85% in non-smokers).	Unsure.	Litter and environmental action programmes in schools.	Unsure.

3	No.	Does not think it would be cost effective.	-	Yes – very strong relationship with them for about 10 years. This council is a member of KNZB.	Clean-up projects, graffiti removal, environmental programmes aimed at children in primary and secondary schools – we have done skits in schools and have held a colouring competition.	Yes - \$3000 per annum for all projects, not just anti – litter. This money comes from the council budget.
4	Personal ash trays, but not willing to ‘go that far’, as this council does not believe it would work. Volunteer clean up groups work well.	Good impression. Cut down on litter problem and can target problem areas.	This council has heard they work well. None currently installed in this area.	Yes, for some clean up weeks. Working half and half with KNZB to fund butt bins.	Local volunteer groups responsible for clean up weeks and ‘keep city beautiful’ month. Programmes such as ‘adopt a spot’ where people can adopt a spot in the city to keep clean. Also tree plating, beautification and more work on targeting graffiti.	No.

5	Increased butt bins, smoke free areas.	Advantageous. Can also use a general bin with metal top for stubbing out cigarettes.	Difficult to control and enforce. Certain stadiums and sports areas enforce this and it works well.	Not often.	Purchased car litter bags and clean-up bags from KNZB.	Decided not to affiliate with KNZB. Members felt the membership fee could be better used at a local level.
6	No.	The council sought funding for cigarette butt receptacles outside hotels. The funding was declined, so the project did not proceed.	-	Used at least annually for litter clean-up days.	The community has its own tree planting, stream restoration, graffiti removal, and environmental education programmes.	No financial support for KNZB given.
7	The KNZB butt-bin campaign – works well.	Works – but to a degree. Might have to get the area that they are put in right so that the bins will actually target the problem.	Not relevant.	No.	Decided against campaign due to costs.	No.
8	No.	Already implemented in region. Works well with respect to time taken to clean up area since we have installed them.	Good idea, from a non-smokers perspective. The bins could reduce the cost of cleaning streets if the litter is confined to specific areas.	No.	-	-

9	‘Be The Difference’ campaign in one area had the ‘smoking fish’ education resource, asking people not to put litter down the storm water drains.	Huge cost implication – installation, cleaning, and maintenance. We are concerned that butt bins would be seen as encouraging smoking.	If our council were to adopt a smoke-free policy for public places, such as parks and playgrounds, it would be primarily for social outcomes rather than specifically to target litter, however a reduction in cigarette butt litter would be seen as a potential positive side effect.	We purchase bags and gloves from KNZB for beach clean ups. However, we do not restrict the distribution of these materials to once a year for ‘Keep NZ Beautiful/clean up NZ’ week.	None aligned directly with KNZB.	No.
10	No.	We have installed a butt receptacle for the organisations’ smokers who gather outside to smoke in their breaks.	-	No.	No.	No.

5.2.4 Views on the Tobacco Industry

Councils' views on the tobacco industry are reviewed in Table 13 below.

Four councils were aware that the tobacco industry fund or promote the butt bins promoted by KNZB. Another four were unaware, and two not sure or did not want to comment.

When asked whether the councils thought the tobacco industry should provide funding to KNZB for butt bins, two did not respond; seven thought that the tobacco industry should be responsible for 'clean[ing] up their own mess' and thought funding from BAT to KNZB was acceptable in the interests of cleaning up cigarette litter. One thought that the funding should come from 'a variety of sources so each can benefit from publicity'. Only one council representative stated that their council was associated with the tobacco industry and would be open to further funding from them if it were to reduce costs.

Table 13: Councils' views on the tobacco industry

Council	Are you aware of any links between KNZB and the tobacco industry in New Zealand? What is your perception of these links?	Do you think the tobacco industry should provide funding to Keep New Zealand Beautiful – in particular to fund more cigarette butt bins?	Is your council / group associated in any way with the tobacco industry?
1	No.	Yes – corporate responsibility.	No.
2	Unsure.	Seems like a good idea.	No.
3	Have promoted butt disposal bins.	Yes.	Not that I am aware of.
4	Have heard BAT is one of the sponsors. Received a letter from ASH outlining the funding situation.	Yes, it would be a form of acknowledgement that the tobacco industry does contribute to the mess. This council feels the tobacco industry is just 'ticking the boxes', and there is probably some underhandedness involved.	No.
5	Aware KNZB received sponsorship from tobacco industry.	It is a matter for the two parties to agree on. Ideally, funding should come from variety of sources so each can benefit from publicity. Individual authorities should provide cigarette bins, not the tobacco industry.	No, however Imperial Tobacco staff did a beach clean-up in our area as part of last year's clean-up week.
6	A letter was received by the council outlining some links between a KNZB board member and bin providers.	Generally littering occurs outside bars during alcohol consumption; the presence of bins may not help the littering. In terms of the inferred link of tobacco industry encouraging smoking by providing butt bins, this council member believes this is nonsense.	No.

7	No.	Yes – Corporate social responsibility (like the Lottery Commission).	Yes, and council may consider associating with tobacco industry if it helps decrease costs.
8	No.	Yes.	No.
9	Unsure, no comment.	Yes, it’s not just the set up costs, there are ongoing fees to consider.	No.
10	No.	-	No.

Chapter Six

Study Four: Stakeholder Interviews

'[W]e're not about health problems or anything else, we're about litter'

Keep New Zealand Beautiful CEO Simon Johnston

British American Tobacco (BAT) New Zealand declined to participate in our study. We interviewed a senior representative of Action on Smoking and Health (ASH) and the current chief executive officer of Keep New Zealand Beautiful (KNZB).

For clarity and simplicity the results of this study are presented under three main themes: (i) the extent of cigarette litter in New Zealand; (ii) the nature of the relationship between BAT and KNZB; and (iii) potential impacts for public health in New Zealand.

6.1 The Extent of Cigarette Litter in New Zealand

Action on Smoking and Health said that they were not initially concerned with the issue of cigarette butt litter, as it was out of the scope of their organisational goals. However, due to the rise in cigarette butt litter, as a result of the 2004 Smoke-Free Environments Act, and the involvement of tobacco industries and anti-litter organisations, it has become relevant to their own campaigns.

ASH: "Historically ASH had had an internal policy to ignore the issue, to avoid the issue at all costs as we were always focussing on getting strategies around prevention and cessation...[B]ut it has come up for ASH in the last little while...[I]n collaboration with the Cancer Society, [ASH] ...has just written a letter to the Chief Executive of Keep NZ Beautiful, around their collaboration with BAT at the moment. So now it is out there on the ASH agenda."

ASH: "More people are smoking outside...[with regards to the Smokefree Act] ...and therefore disposing of their cigarette butts in an inappropriate manner...[S]moking is becoming an outdoor phenomenon...[S]o with the Smokefree legislation, more people are smoking outside, but less people are smoking, in response"

Keep New Zealand Beautiful highlighted the current cigarette butt litter issue in New Zealand and stated that it was a significant proportion of the total litter problem. KNZB further explained that this trend is consistent worldwide; based on the results they had themselves

obtained. They also believed that cigarette butt litter was on the rise, in New Zealand, due to the introduction of the Smoke Free Environments Act.

KNZB: "Cigarette butt litter in NZ is approximately 50% of all litter in NZ. And in more urban spaces they are probably closer to 60% of the litter problem in New Zealand."

KNZB: "These are figures we have been getting through a worldwide trend... [Overseas and also local research] ... and evidence we've had... we have done some research into that locally in certain areas and we're... probably slightly behind Australia and England... [we have] probably a bit more butt litter at the moment."

When questioned if the Smoke-Free Environments Act directly resulted in an increase in cigarette butt litter KNZB responded:

"Very much so... [T]he amount has changed since the law came in, in 2004 regarding cigarette butt litter. That meant everyone had to smoke outside but at that same stage when that law came in, none of the lawmakers took into consideration the impact of people's smoking habits."

Both ASH and KNZB stated that urban areas and waterways were the main sites affected by cigarette butt litter.

ASH: "In NZ I think it is an urban, waterways problem. Environmentally I think the biggest impact is down the storm water drains from urban areas out to the coast".

KNZB: "... [P]eople are going to go to the nearest place to drop their butt and that is normally on the drain, in the drain, on the garden, along the footpath, anywhere like that... [T]he complaints about the cigarette butts in the neighbourhood and in the community and in the storm water drains, it has just rapidly increased"

Keep New Zealand Beautiful explained that there was a significant impact on the environment by the toxins released from cigarette butts. However, KNZB seemed unclear as to the exact length of time it takes for cigarette butts to biodegrade.

KNZB: "Well anything that goes through our stormwater drains has an environmental impact... [B]ecause butts are small, they end up in our marine environment through the stormwater drains... [T]he butt is acetate plastic... [S]o it ends up like a lot of

plastic...[w]ith a chemical reaction, if fish touches, or the marine life touches it...[t]hey have poisoned the environment...[e]specially the marine environment”

When asked to confirm the duration, 1 month to 3 years, as stated in the KNZB toolkit (Appendix Two) KNZB CEO stated:

“...[T]hat’s incorrect...[I]t takes about 8 to 10 years to biodegrade. Further in the interview KNZB CEO stated, “5-8 years was the research done overseas.”

According to ASH, the most effective way to reduce cigarette butt litter was to reduce smoking prevalence. Action on Smoking and Health did mention that cigarette butt receptacles may potential reduce some litter but it would not change smokers’ behaviour or significantly reduce the issue of cigarette butt litter.

ASH: When asked about the most effective way to reduce butt litter...”Reduce prevalence...[I]n the 60s and 70s many people were smoking, 45% of the adult population, and now it’s down to 19, 20%. So the decrease in butt litter from that is huge”.

ASH: When asked about butt receptacle effectiveness...[P]robably it would reduce some litter, but it’s not going to change the people who flick their cigarette butts out of the car, it’s not going to change the people who empty their car cigarette ash trays when they are parked at a park. Unless you have them everywhere, I don’t think that it’s going to help at all”.

In contrast to this, KNZB believed that cigarette butt receptacles were the most effective way to deal with cigarette butt litter. Keep New Zealand Beautiful claimed that pilot studies, conducted by KNZB, have recorded significant reductions (70%). However, this is inconsistent with KNZB’s website figures of 30% reduction with butt receptacles. Keep New Zealand Beautiful stated that they have not considered other alternatives such as reducing smoking prevalence as this was an issue of behavioural change, not litter.

KNZB: When asked about the most effective way to reduce butt litter...Basically through receptacles. Specific receptacles to stop litter...[E]very company, every building manager, every council, every university should insist that these be installed... with the idea that they are very easy to clean, and it cuts off basically 30

million butts ending up in our stormwater drains. Every bar should have one, at least one...[I]t's the only logical way to go...[R]eceptacles have proved to work"

KNZB: "...[W]e did a pilot in Newmarket. We installed 50 units through Newmarket main area...[W]e now collect just under 60,000 butts a month. It'd be about 70% of what was going onto the ground...I believe that was a 70% reduction in butt litter"

KNZB: When questioned about alternative methods such as reducing smoking prevalence KNZB CEO stated... "...[W]e're not about health problems or anything else, we're about litter, and that's what all our sponsors' messages are about. It's about litter".

6.2 The Nature of the Relationship between KNZB and BAT

Keep New Zealand Beautiful acknowledged that they are funded by BAT but emphasised that BAT is one of a pool of corporate sponsors and a member since before 2008. British American Tobacco's involvement in KNZB was described as only of a financial nature. Keep New Zealand Beautiful expressed that at present there are no tobacco industry representatives on their board, however there have been in the past. In the interview KNZB stated that the cigarette butt litter campaign was not solely funded by BAT, despite BATNZ's website stating the opposite (80).

KNZB: "...[T]hey've been a sponsor [since] before my time. I joined here in 2008...So they've been a member since the previous year... And I know they're a member this year."

KNZB: When asked about tobacco industry representative on KNZB's board KNZB CEO said... "prior to my time I think there was 1 or 2, I'm not sure, but there're definitely none this year".

KNZB: When questioned as to the allocation of BAT funding KNZB CEO stated... "...[P]robably about 80% of their funding goes into that...[the cigarette butt litter campaign]. When asked about the remaining 20% KNZB stated "...[T]o the general administration."

It was found that BAT was not listed as a sponsor on KNZB's website even though BAT and KNZB had clearly stated that they were a sponsor (80, 149). The CEO of KNZB explained that this was not an attempt to hide BAT's involvement but instead, due to recent law changes, they were not permitted to list BAT as a sponsor as this could be seen as a form of

advertising for the tobacco company. Keep New Zealand Beautiful stated that the law changes to eradicate cigarette advertising have had a significant effect on the funding received by sports clubs and he was personally upset by the law changes.

KNZB: “They’re not allowed to be listed because of the anti’s in NZ. You cannot expose cigarette companies, tobacco companies, on your website because that would be called advertising...[Y]ou’d be aware of all the sports that lost all its funding?...[L]osing tobacco companies as sponsors of sport and events and occasions and teams...[i]t’s made a lot of sporting clubs upset?...[W]hich is an absolute disgrace...”

Keep New Zealand Beautiful believed that their relationship with the tobacco industry was not one of concern and that they have both partnered to manage the issue of cigarette butt litter. Keep New Zealand Beautiful stated that there will always be “anti’s”, however that is not a major concern to them. Furthermore KNZB expressed that they do not personally believe that BAT uses such relationships as public relations exercises.

KNZB: “They’re [BAT] willing and we’re all about butt litter...[W]e don’t care about any other messages that people try to portray from this relationship, along with any of our other sponsors. Because the anti’s are anti...Coca Cola for instance. You know, it just goes on and on and on...[A]nti’s are too much...for this country.”

KNZB: When asked about this relationship being a public relations exercise KNZB commented...“No not public relation exercises as far as we’re concerned.”

Action on Smoking and Health are of strong opinion that not-for-profit organisations such as KNZB should have no association with the tobacco industry. Action on Smoking and Health stated that it misrepresents the tobacco industry as a responsible corporate entity and undermines the integrity of the not for profit campaign. Additionally, ASH also reported that these relationships are beneficial for tobacco companies as they can use them to prevent the introduction of further restrictions on outdoor smoking in the future.

ASH: “...[T]he tobacco industry having anything to do with a campaign like that is that they get credibility as an organisation....[I]t’s all about this impression that they’re a caring, concerned industry that’s environmentally aware...and...[o]f course that is a complete myth”.

ASH: “BAT does it for their own ends, so they look like a caring corporation of course...[O]rganisations like Keep NZ Beautiful...[h]ave BAT representatives on their board...[T]herefore they are compromised and can’t make independent decisions on what is the best solution to this problem...[B]AT, they won’t care about keeping NZ beautiful, for any other reason than that it makes them look good down the track”.

The ASH representative expressed that it was their responsibility, along with other anti-tobacco groups, to raise awareness as to the ethical quagmire of such relationships.

ASH: “[I]t’s up to ASH and those other Tobacco Control organisations to keep a look out and inform organisations about tobacco money and how it compromises your integrity”.

6.3 Potential Impacts for Public Health in New Zealand

Keep New Zealand Beautiful’s opinion with regards to the effects of cigarette butt litter or a relationship with the tobacco industry on public health has been reported above. For clarity their main opinion is summarised as:

KNZB: “...[W]e’re not about health problems or anything else, we’re about litter...”

Action on Smoking and Health expressed concern that by allowing such relationships to exist, as between KNZB and BAT, tobacco use is normalised in New Zealand. Additionally, as previously reported, it undermines the integrity of the organisations involved with tobacco companies and fuels mistrust amongst the general public which inevitably will have negative consequences on any campaign.

ASH: “The worst effect for public health is that the tobacco companies get an image of being good corporate citizens, because I think that tobacco normalisation in NZ is still relatively young. And tobacco control organisations are still learning how to do that and use it effectively”.

Chapter Seven

Discussion

7.1 Key Findings

Key findings of the four studies are discussed below in relation to the three aims identified in Section 1.8.

7.1.1 What is the Extent of the Cigarette Butt Litter Problem in New Zealand?

The literature review and data from the four studies revealed little or no quantitative data on the extent of cigarette butt litter in New Zealand. One published report on cigarette litter in New Zealand suggested that 58% of all litter on New Zealand beaches was related to cigarette butts and packaging (18).

There was a low response rate in Study One. Four groups of the seven that consented responded, which limits the conclusions that can be drawn from the results. However, it is important to note that three of the four groups agreed that cigarette butt litter was a significant issue for their organisation. Principal reasons for stating this were the environmental harm caused by cigarette butts, as well as aesthetic reasons.

There were varying views in relation to the extent of the cigarette litter problem in Study Three. The councils reporting litter to be a problem were mainly in urban areas, and especially councils that have a large tourism industry associated with their area. Specific areas of concern highlighted during our interviews were mainly surrounding bars and cafes, beaches or lakeside areas, parks, and also areas where there is a heavy flow of foot traffic.

Many councils have noticed an increase in cigarette butt litter since the Smoke-Free Act of 2004, as it moves people from inside buildings out onto the street to smoke. Councils have also noticed that the prevalence of smoking is decreasing. This however is anecdotal, based on impressions of their own areas. Most councils see cigarette litter as just part of the general litter problem, rather than an additional issue that should be considered separately.

Interviewees commonly described cigarette butt litter as aesthetically displeasing and environmentally harmful, as the cigarette butts often pollute storm water drains.

Councils that were unaware of the extent of cigarette litter and had not carried out monitoring were less likely to implement strategies or campaigns to target the cigarette litter problem.

When asked about the locations most affected by cigarette butt litter (in Study Four) ASH see that urban areas are most affected, and were particularly concerned that cigarette butts find their way into storm water drains, and subsequently into marine environments.

Like many councils, ASH see that the Smoke-Free Environments Act has essentially turned smoking into an “outdoor phenomenon”. Campaigns around Smoke-Free cars and homes also contribute to this. This has seen an accompanying increase in the amount of cigarette butts potentially dropped outside. However, this needs to be seen in context of the lower prevalence of smoking. Action on Smoking and Health summarised the situation as more people are smoking outside, but less people are smoking overall due to the Smoke-Free Environments Act. This ties into their main argument that the most effective means of dealing with the issue of cigarette butt litter is to reduce the prevalence of smoking. The large reduction in smoking prevalence from the 1960s to now was discussed as a major driver of reduced cigarette butt litter today compared to then.

In Study Four, KNZB stated that cigarette butt litter is a major problem for New Zealand, comprising “50% of the litter problem” in New Zealand. This figure was taken from “overseas and also local research” but no specific studies were named. The Smoke-Free environments Act was also discussed, with KNZB’s position being that volumes of cigarette butt litter have increased, citing anecdotal evidence.

7.1.2 How is this problem perceived and dealt with by environmental groups, councils, the tobacco industry and the public health sector?

Current interventions and effectiveness

Only one environmental group (Study One) had in place a policy to reduce cigarette butt litter – they promote the installation of butt bins in places where smokers congregate. Two other organisations focussed on general litter reduction through education as opposed to specifically cigarette butts.

Environmental groups were also asked to rank interventions to reduce cigarette butt litter, by their perceived effectiveness. Again, the low response rate and sample size is an impediment to drawing broad conclusions. But notably, three groups ranked the establishment of downtown smoke-free areas as one of the most effective interventions. Two groups ranked

increased policing and enforcement of current litter bylaws as one the most effective means of reducing cigarette butt litter. (One group had more than one answer.)

Overall, there was little literature from Study Two to support the outright effectiveness of cigarette butt-bins in reducing tobacco related litter. Despite the lack of significant, worldwide evidence, many governments are opting to use butt bins as their main focus in tackling cigarette litter. (147,148) The few articles we found have shown that some smokers in Wellington and Australia do deposit their butts into a butt-bin or ashtray, provided one is nearby, therefore special cigarette butt receptacles could be useful in reducing tobacco litter. These studies all used different methods and therefore are not directly comparable to each other. More rigorous research, with sound methodology, is needed in this area in order to evaluate the effect of cigarette litter interventions.

The priority of butt litter

In Study Three, the fact that many councils do not see cigarette litter as a significant problem is reflected in their lack of policies and interventions. Many have extensive litter projects in place, but these are focussed on general or other kinds of litter, such as fast food litter. This could be for a variety of reasons – perhaps fast food litter is much more visible than cigarette litter, as it is bigger and brightly coloured. Cigarette litter has been around for so long that in some ways it may have become an accepted part of the footpath. Many councils said they would consider butt bins, but were concerned about the costs that would arise from maintaining and emptying them.

Only one council reported Iwi involvement in eradicating cigarette butt litter. This could be seen as a concern, as Maori have very high rates of cigarette smoking compared with other ethnic groups as well as a greater burden of disease associated with tobacco use. Involving Maori in initiatives to reduce cigarette butt litter may also help decrease tobacco use within this population.

Some councils stated that reductions in cigarette butt litter may result from having strategies aimed at certain demographic groups. Groups mentioned included youth, Asians communities, and backpackers/tourists. However, these suggestions were based on council impressions that cigarette butts accumulate in areas where such groups congregate, therefore was highly subjective and not based on evidence. More research into the distribution and

quantities of cigarette butt litter is required to be able to determine which demographic groups should be targeted by anti-litter policies, if any.

Certain councils specifically mentioned improving community spirit and pride as a means to target litter. By installing a sense of pride within their communities, councils felt that residents would take better care of their surroundings. There could also be flow on effects, including less cigarette litter and improved community cohesion. Tourist centres face the hurdle of not being able to increase awareness of the issue in their communities, due to the highly transient population. Travellers and tourists may not have the same civic pride as a permanent resident in the area, and do not have time enough in the area to understand that litter is an important problem that they could help to address. Campaigns to increase civic pride were often based around schools.

Biodegradability is another issue considered by councils. Several councils mentioned improving biodegradability as a possible solution to environmental toxicity, and saw this as the most cost effective and efficient way of targeting the problem. More research is required however before this intervention is implemented.

Knowledge of and attitudes to interventions

Half the councils were not aware of any interventions to target cigarette butt litter. The other half were aware of interventions such as cigarette butt bins as part of KNZB's campaign and personal ash trays (used in Melbourne). However, it is apparent that there is very little information sharing between councils with regard to successful interventions to counter littering in their regions. Increased sharing of ideas, strategies and successes could lead to more effective anti-litter programmes nationally.

Council impressions of the interventions presented to them were varied. Personal ash trays may seem like a good idea to many people, but as one councillor pointed out (who was also a smoker) many smokers find this idea undesirable and would not want to carry around their cigarette litter all day in their handbag. This demonstrates the differing views of smokers and non smokers on the topic of cigarette butt litter, as many options that non smokers would find viable (such as personal ash trays) would be unacceptable to smokers.

Councils were divided on the use of butt bins. Many councils had only heard of the butt bins through the KNZB website. Some councils that had already implemented the bins thought that

they seemed to work, and that the cost was effective in terms of reducing clean up time of the area. However, no studies had been done to confirm the effectiveness of the butt bins, and again evidence of their effectiveness was mostly anecdotal. A few councils said that they would not fund them, as the emptying and maintenance costs would outweigh the benefits. Funding of the butt bins, therefore, seemed to be the main barrier preventing councils from implementing butt bins in their anti-litter campaign.

Most councils thought that the intervention of butt bins was a good idea, but most of their opinions seem to be based upon websites such as the KNZB website, as opposed to research into the problem. Therefore, it is possible that bias may play a role after reading about the benefits of installing butt bins from a self promoting website such as KNZB. It was interesting that only one council stated that they thought that butt bins might encourage people to smoke, which could be reflective of ASH's view that tobacco control is still in its early stages in New Zealand.

One council had done a survey regarding smoke free areas, and found that most people were in favour of having playgrounds, sports grounds and parks smoke free. This may be a good reflection of the way smoking is seen as decreasingly socially acceptable. One study found that the majority of smokers as well as non smokers were in favour of Smokefree parks in New Zealand.(150) A few who had instigated smoke free signs in parks and playgrounds said it was more a social responsibility effort rather than a strictly enforceable bylaw, as smoking is hard to police.

7.1.3 What is the nature of the relationship between these key players and what implications do these relationships have?

From Study Three, it became evident that about half of the councils had some level of involvement with KNZB, and worked with them on a number of projects. Many councils felt that their money could be used at a local level more effectively than if it was spent on membership fees for KNZB – which range from \$800 to \$1500, depending on the population size (151).

In general the councils seemed to be in favour of KNZB, stating that their ideas were good but the costs of being involved with their campaigns were too high and they had come up with similar projects themselves. Only one council stated that they were funding KNZB as well as implementing their campaigns.

Many councils were unaware of the links between KNZB and the tobacco industry, and if they were aware, it was due to the letter sent from ASH outlining the current funding situation between KNZB and BAT. Interestingly, many councils thought that it was in the interests of corporate social responsibility for the tobacco companies to be sponsoring cigarette litter projects, and many did not see a possible conflict of interest that this may entail.

Again, although most of the councils had no affiliation with the tobacco industry, one council said that they would consider taking funding from them or being associated with them if it decreased costs. The other councils did not state any reasons as to their stance on being associated with a tobacco company. One other council stated that Imperial Tobacco helped them with a beach clean up the previous year, which could indicate that they are in fact associated with the tobacco company (but perhaps this is not widely acknowledged within the council). It is conceivable that in a council with multiple partnerships with organisations and various volunteer groups, the wider implications of one such association with the tobacco industry may escape attention.

In Study Four, ASH stated that their policy towards cigarette butt litter has historically been to ignore the issue, as the impression was that focussing on litter would detract from their overarching goals of reducing the prevalence of smoking. However this has changed recently, due to BAT's funding of KNZB, and in association with The Cancer Society, ASH sent a letter to New Zealand councils urging them to not participate due to tobacco industry funding (123).

As an environmental organisation, KNZB is understandably concerned with the environmental burden of cigarette butt litter. The small nature of the butts means that they can easily enter storm water drains, and flow into the sea. However as previously discussed, with regard to the composition and biodegradability of cigarette butts, there is some discrepancy between the KNZB and Smokin Station websites – Smokin Station being the preferred supplier of cigarette butt bins to the KNZB programme.

When clarification was sought, the CEO of KNZB was of the opinion that cigarette butts are “*biodegradable over a period of 8-10 years*”. However, he acknowledged that despite the eventual biodegradability of cigarette butts they will inevitably have a significant impact on the environment as toxic chemicals are released.

With regard to the BAT-KNZB relationship, ASH stated that the central problem with BAT funding of KNZB is that the organisation's independence and integrity is compromised. The fact that BAT board members have also been on the KNZB board in the past also adds to this. The impression from ASH was that KNZB is genuinely concerned about reducing litter in NZ, but that the relationship with BAT allows the latter to project a socially responsible view. The comparison was made with the Life Education Trust, which received tobacco industry funding until the controversy attached to this led to the relationship being broken. Action on Smoking and Health see KNZB as an organisation taking tobacco funding as a way to try and do something good for society.

This highlights the funding constraints faced by small organisations. Keep New Zealand Beautiful stated that BAT were just one of many corporate sponsors, and that the organisation focuses on the end goals. The CEO was frustrated at the attention that had been brought to bear due to the relationship with BAT, and also at the way that sports clubs have lost tobacco funding. Action on Smoking and Health believes that it also shows how more effort needs to be made by the tobacco control sector to inform organisations about tobacco money and how it can compromise organisations.

The relationship between KNZB and Smokin' Station is also important to consider, as these two organisations have the same director. Keep New Zealand Beautiful is promoting the installation of cigarette butt bins throughout New Zealand, with the preferred supplier being Smokin Station. When interviewed, the CEO of KNZB insisted that Smokin Station was only the preferred supplier. The relationship may still however, be a potential conflict of interest, and has been documented in a letter by ASH and the Cancer Society to New Zealand councils.(123)

The fact that BAT is involved adds an additional dynamic. Both ASH and KNZB stated that the Smoke-Free Environments Act has meant that more smokers are smoking outside, which has the effect of more cigarette butt litter – although the exact amount is not quantified. The tobacco industry is concerned that Smoke-Free legislation may be extended to outdoor areas. With KNZB stating prominently that cigarette butts are unsightly, this relationship designed to counter increased opposition to outdoor smoking could be seen to detract from calls to restrict smoking in outdoor areas.

The opinion of ASH on the potential impacts for public health was also documented in Study Four. This is that any partnership that allows tobacco companies to portray themselves as responsible corporate citizens is detrimental to the public health cause. In this respect, partnerships between BAT and environmental groups are not new, as BAT has described on its website involvement in beach cleanup campaigns. The motivations for recreating the industry's image have been discussed in the literature as damaging to the public health cause, through painting the tobacco control side as universally 'anti', and working against community group funding.

During the interview with KNZB, it was clear that the potential impacts for public health were seen by the organisation as irrelevant to them. The idea that KNZB is solely an environmental organisation has been reinforced many times. They identified litter, graffiti and recycling, and encouraging behavioural change in these areas, as their areas of interest, and explicitly said that they weren't involved in any issues outside of that.

7.2 Strengths and Limitations

Before considering the implications of the findings the strengths and limitations of the above four studies are reviewed below.

7.2.1 Strengths and Limitations of Study One

The major limitation of this opinion survey of environmental groups was the fact that the response rate was so poor, in addition to the small number of total responders (n=4). This limits interpretation of the results, and brings in significant non-responder bias. More specific inclusion criteria limiting the groups to those organisations who have a focus on litter may have increased the response rate, as some groups declined on the basis of not knowing about the topic. The low number of responders also limits the generalisability of the results. Time was another major factor, with a need for responses less than two weeks before they had been sent out.

If we had predicted the response rate would be so low (even after offering phone interviews) it may have been possible to change the survey to an in-depth phone interview (similar to Study Four) which is very feasible to conduct with four agencies. Thus we may have obtained more detailed information. Additionally, it may have been useful to extend the sample to include Australian or international organisations.

It must be noted however, that to our knowledge, this was the first study that surveyed environmental organisations on the extent and perceptions of cigarette litter.

7.2.2 Strengths and Limitations of Study Two

The major strength of this review is that it was conducted systematically. In other words a defined methodology was put in place before the search was conducted. This resulted in four articles being identified that had met our criteria. While a recent review on a similar topic had found no articles (152).

Potentially, we could have widened the review to the non-English language literature in order to increase the number of articles found. However this was not feasible given our language constraints.

7.2.3 Strengths and Limitations of Study Three

There are a few significant biases worth mentioning in relation to Study Three. Firstly, the response rate of 10/22 councils was not ideal. We only interviewed six urban centres, two tourist centres, and two rural centres. Therefore the rural centres may have been underrepresented and the bigger, tourist centres overrepresented. This may reflect a selection bias in that those bigger cities with more at stake in terms of aesthetic appeal and tourism may have been more likely to get involved at the recruitment stage.

As there was very little collected data on the rates of cigarette butt litter before and after an intervention, no comparative conclusion can be drawn (and the evaluation of the effectiveness of the intervention becomes therefore subjective). Also, the individual opinions of the council staff we interviewed may not necessarily be reflective of the whole council position. The position of the council staff person we surveyed would have a big influence on survey response. For instance, the staff person for waste management would have a different view(s) in comparison to the health and environmental staff within the council.

Nonetheless, to our knowledge, this is first study in the world that has examined local governments' response to cigarette litter from both an interventional and policy perspective. This Study should be used as a step towards conducting more rigorous, analytical research.

7.2.4 Strengths and Limitations of Study Four

A major strength of this study was our ability to conduct in-depth, detailed, interviews with two key stakeholders in the area. We have thus been able to either contest or (in most cases) support the data presented in the introduction section of this report.

It was disappointing that BATNZ declined to participate in our study hence this may be considered as one of the limitations of this report. However, given the data about their behaviour highlighted throughout this report, it is not surprising that BATNZ did not want to be interviewed in relation to the ethics surrounding corporate social responsibility and their funding of anti-litter groups.

7.3 Implications

7.3.1 Research needs

There is an overall dearth of evidence in this arena.

Effectiveness of interventions

The tobacco industry and associated anti-litter organisations provide statistics on their websites and in annual reports which indicated that cigarette butt litter campaigns have significantly reduced cigarette butt litter (67, 69, 70, 80, 82). These are simple one line statements however, and not backed by any significant research. Regional councils in countries such as the United States, Australia and New Zealand have also reported reductions in the amount of cigarette butt litter (85). This view is backed by the data presented in this report (Study Three). But again, none of these statistics have been proven through rigorous scientific studies. Instead they appear to be more of an estimate as opposed to a result. A recent publication by Novotny et al, 2009 states that they found “*no evaluation data on the effectiveness of such campaigns in reducing butt litter*” (9, 87). Our review found only four documents with relevant data. Additionally, one of these studies, albeit indirectly, was funded by British American Tobacco.

Extent of butt litter

It is apparent from our literature search and interviews that there are few studies that specifically examine the volume and distribution of cigarette butt litter in New Zealand. This makes quantifying the issue difficult, as well as precisely determining any change that has

resulted from the introduction of the Smoke-Free Environments Act. It is important that clear data is available, so that claims to the efficacy of placing cigarette butt bins to reduce cigarette butt litter can be evaluated. Keep New Zealand Beautiful has claimed that installation of the bins will result in a large reduction in cigarette butt litter (by 70%), but there was no published evidence to support this assertion and KNZB did not make any mention of the role of reducing smoking prevalence in reducing cigarette-related litter. Further research into the effectiveness of cigarette litter interventions is needed in order to validate the costs associated with widespread implementation.

Additionally, as mentioned above, only one council reported Iwi involvement in eradicating cigarette butt litter. Eradication of cigarette litter may be sped up with the recruitment and participation of Maori community groups. Perhaps, local councils, district health boards, primary health organisations and non-governmental organisations may be able to combine litter education together with education on the harms of tobacco use.

Further, it was interesting that one council stated that they thought that butt bins might encourage people to smoke. The psychological cues around smoking behaviour and butt bins will also need close examination before the implementation of any widespread intervention strategy.

Biodegradability is another contentious issue around cigarette litter, with different data originating from similar sources on the time taken for cigarette butts to biodegrade. Tobacco industry improvement of cigarette butt biodegradability &/or reduced toxicity could potentially reduce the toxic effects on the environment. However, again, more research is required to establish the current level of biodegradability and toxicity to the environment of cigarette butts, and then to investigate if alternative designs could be more biodegradable and less toxic.

7.3.2 Practice and Policy

Motives and incentives

It is evident from the data presented in this report that councils recognise that cigarette litter is a problem, but their current initiatives to minimise this promotes the objectives of the tobacco industry rather than public health. Large corporations often conduct research on the cost-effectiveness of the initiatives with which it is involved (153). If it is not known whether

cigarette butt bins are effective, is it not logical to investigate this before further funding is provided?

Public health researchers have suggested that tobacco companies deliberately decide not to support more effective initiatives such as litter tax, fines and mandatory cleanup programs. The reason for this is found in the tobacco companies own documents where they state that *“by backing any fees or taxes designated to help clean up cigarette litter, the industry would be buying into the “social cost” argument against smoking”* (154). Also the industry recognised that *“any actions they might take to encourage smokers to refrain from littering could be construed as trying to modify smokers’ behaviour for the greater good of society”* (154). Such actions have the potential to “de-normalise” smoking, stigmatise smokers as inconsiderate members of the community and inevitably reduce revenue for the tobacco industry. By designing and funding a campaign, which the tobacco company has no interest in seeing succeed, they effectively *“gain some positive publicity and make useful local government connections while keeping strict control of the messages smokers receive”*. In so doing they avoid regulations and ensure a minimal impact on the sale of their product (76).

Methods for decreasing cigarette litter and tobacco use

Encouraging bars and restaurants to become responsible for their customers’ cigarette litter production may reduce street litter, and enable owners to grow in their sense of responsibility and pride in clean premises. This view was held by a majority of councils interviewed in Study Three, and was seen as cost-effective. Section 9 (3) of the Litter Act 1979 provides a provision for implementing such an initiative.

Additionally, the establishment of community spirit and pride can lead residents to take better care of their surroundings. This can be particularly useful in the problem areas highlighted by local government.

Information sharing of ideas, strategies and successes may lead to more effective anti-litter programmes nationally. This could be achieved through the instalment of a national database on anti-litter, which councils and related organisations could access.

Additionally, smoke free signs in parks and playgrounds may be hard to police, but are an increasingly vital method to stigmatise smoking behaviour – especially in areas concerning

children. The social responsibilities of smokers and non-smokers, as well as communities need to be employed in this regard.

Many organisations (councils, environmental groups and ASH) mentioned outdoor cigarette litter had increased since the inception of the Smoke-Free Environments Act. In addition, however, these groups mentioned that the overall prevalence of smoking has decreased since the Act came into place. Further restriction on outdoor smoking, limiting it to smaller contained areas, may have the eventual effect of decreasing smoking prevalence. Additional benefits of this approach could include concentrating cigarette litter, thus decreasing the total burden of cigarette litter and associated cleaning costs. Aesthetic improvements of environments would obviously result from decreased cigarette butt litter

Ethics and policy

Tobacco industry CSR policies are a contentious issue that can lead to conflict between the public health sector and non-profit groups. This conflict principally arises around the issue of funding, which can be scarce for many not for profit and community groups. An interview with the chief executive of KNZB demonstrated the frustration that exists in some sectors of the community at the fact that sports clubs have lost tobacco funding. In addition, some councils stated that they were not opposed to tobacco industry funding of cigarette butt bins, as this would help them decrease spending.

Therefore one of the ethical questions surrounding tobacco industry funding is whether to criticise it outright, when such funding may allow constructive activities that otherwise would not occur. This ethical dimension needs to be considered in light of several factors. Firstly, that 5000 deaths in New Zealand are attributable to tobacco use each year (8). Secondly, the potential for conflict between the community and the public health sector – who were referred to as ‘the antis’ in one interview. And lastly, the fact that tobacco industry documents released in the US have explicitly described how such funding partnerships are designed to improve the image of the tobacco industry, again to the detriment of the public health cause (refer to Section 1.6).

Tobacco industry CSR therefore improves the image of the industry and has a negative effect on public health, and communities in general. In stating this, it is recognised that this funding can be extremely attractive to community groups. Such groups may accept tobacco funding

out of a desire to facilitate their own activities and programmes, without understanding the effects for tobacco control and the health of the New Zealand population.

Conclusions

In conclusion, evaluating the true nature of the partnership between the tobacco industry and litter related organisations are no easy task. Both the perspectives of the tobacco industry and the public health sector will inherently be biased toward their own cause. Though, when considering the facts it seems unlikely that the multi-billion dollar tobacco industry's motives are purely altruistic. At a corporate business level this could be argued to be acceptable. However, from a public health stand point the actions of the tobacco industry, as well as organisations directly or indirectly associated with them, further contribute to the persistence of smoking and its devastating effect on society.

Stronger policies at local and national government need to be implemented urgently to both reduce uptake of tobacco use, and the burden of disease caused by its use.

Specific recommendations are outlined below:

That independent scientific research be conducted to examine:

- the extent of the cigarette litter problem in New Zealand.
- the biodegradability and environmental toxicity of cigarette butts
- the effectiveness of cigarette litter interventions (e.g. butt bins, smoke-free parks); and to compare these interventions with each other with respect to decreasing both, the prevalence of tobacco related litter, and the prevalence of tobacco use.
- other effects of cigarette litter interventions, for example, providing social cues to smoking and normalising smoking behaviour (especially among children and adolescents).

That as part of this research and the implementation of interventions to reduce cigarette litter, key stakeholders, community groups, Iwi and Maori Health providers be consulted.

That the New Zealand Government set up a national on-line database on aspects of anti-litter programmes, including providing information on specific cigarette litter interventions, the organisations involved and their funding sources.

That the New Zealand Government explore the scope and extent of CSR related funding by the tobacco industry in New Zealand and explore the feasibility of a ban of direct and indirect tobacco industry CSR related funding of any organisations.

That in the event of a ban on CSR funding, the New Zealand government set up a time-limited pool of funding to help organisations with replacing tobacco industry funding.

That Government move to increase restrictions on outdoor smoking, limiting it to progressively smaller areas.

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Appendix One: Extent of Tobacco Litter: Review of Grey Literature

The majority of the grey literature regarding cigarette butt litter originates in developed countries. Relevant information on the internet regarding cigarette butt litter in New Zealand, Australia, Britain and America was reviewed, and findings are discussed by country.

United States

A prominent online information source, About.com, states that there are 1.1 billion smokers worldwide. If this trend continues, by 2025 there will be 1.6 billion smokers. Each day, 15 million cigarettes are sold with 5 trillion being produced annually. The filters alone from all these cigarettes would weigh approximately 2 billion pounds (1). The environmental organisation Keep America Beautiful, which aims to reduce littering in the United States, claims that only 10% of cigarette butts are disposed of properly and that they are the item least likely to be placed in a rubbish receptacle (2).

Such a volume of litter has serious implications for the environment and for communities. Accordingly, measures to address this issue have been taken in the United States. One such measure was the distribution of personal cigarette butt dispensers in The Old City District of Philadelphia (3). A local TV news report found on YouTube showed an interview with a local councillor regarding a survey on littering in the district (3). The councillor stated that of 100,000 smokers interviewed, 35% admitted to littering five butts for every packet consumed. It was also mentioned that cigarette butt litter affects community quality of life through impacts on foot traffic, tourism, business and housing development. The litter also creates fire hazards, decreases tourism revenue and affects wildlife.

Keep America Beautiful also states that cigarette litter predominates in 'transition points', which are places where smokers must discontinue smoking before proceeding (2). To address this dynamic, in some parts of the United States such as Athens, Georgia, locally designed cigarette butt bins have been installed in these transition points (4).

Another strategy employed to counter litter is education. One TV advertisement in New York tried to educate smokers to be more responsible with their cigarette butts, discouraging people

from dropping them in the street (5). The advertisement also stated that every day worldwide 1 billion butts are dropped.

United Kingdom

A 2008 television report states that cigarette butts are the biggest litter problem in the country. Over three quarters of streets are strewn with butts, which costs the government £370 million for cleaning. The report states that cigarette butt litter has increased by two thirds since Smoke-Free legislation was passed in 2007.

A website promoting public ashtrays states 200 million cigarette butts are discarded each day in the United Kingdom, totaling 122 tones daily (6). Cigarette butts are reported to be the most common litter on beaches, and comprising 70-90% of street litter. It is also reported that cigarette butts are the main cause of fire related death and injury in the UK, causing 5400 property fires annually. (6)

Keep Britain Tidy is the environmental group working to reduce littering in the United Kingdom. Chief Executive Phil Baron believes the problem can be targeted by smokers using portable ashtrays and businesses taking more responsibility by installing cigarette bins around their workplaces (7). In addition, in the United Kingdom there is an £80 pound on the spot fine for anyone caught dropping a butt (7).

Australia

Cigarette butts are the number one litter item in Australia. They make up 49% of the litter stream. It is estimated that each year 7.2 billion cigarette butts make their way into the environment as litter, and at current rates this is set to increase by 429 million per year (8).

Australian research into cigarette butt litter found that most smokers don't consider cigarette butts to be litter. It was shown that smokers believe that stubbing it out on the street is in fact environmentally responsible, in that the cigarette is being properly extinguished (2). Smokers believed that littering is due to a lack of receptacles, and over 80% of smokers said they would dispose of their butts appropriately if more bins were available, according to the Keep America Beautiful website.

A media release by Keep Australia Beautiful in 2007 estimated that over the two week Christmas and New Year period, 280 million cigarettes would be smoked and 12.5 million

cigarette butts would be discarded, ultimately ending up in waterways and beaches (8). In order to address this, 12 500 personal ashtrays were distributed to smokers to dispose of their butts responsibly. Fines of A\$375 were also littered to those caught throwing a butt.

New Zealand

The Keep New Zealand Beautiful website states that since the smoke-free laws were set out in 2004 there has been a considerable increase in butt litter. Cigarette butts are reported to be one of the most common litter items, and have a detrimental effect on marine life such as the Maui's dolphin. (9)

According to an article in the New Zealand Herald, school group field studies have drawn attention to the issue of cigarette butt litter. These field studies have noted the negative effects of cadmium, lead and zinc leaking into the environment. (10)

Smoke-Free outdoor areas are the best way to reduce cigarette butt litter, according to the Smoke-Free Council's website (11). Studies from Opotiki show evidence that smoke-free outdoor areas can reduce cigarette butt litter. Opotiki is the first smoke-free town in NZ and after one year showed a 60% decrease in butt litter (12). However 'responsible litter education', an approach promoted by the tobacco industry, has shown no reduction (12).

The smoke-free council's website strongly points out tobacco companies' involvement in smoking reforms. The site refers to Australia's work in alerting authorities to the agenda of tobacco industry sponsored anti-litter campaigns (12)

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**Appendix Two:
KNZB Toolkit**

Appendix Three: Survey of Environmental Groups



Cigarette Litter Survey

1. From the point of view of your organisation, is cigarette butt litter an issue?

- Yes
 No

Comments:

2. Please rate the following potential negative effects of cigarette butt litter as “Very significant,” “Significant,” “Neither significant or not significant” “Not significant” or “Definitely not significant.”

Effect	Very significant	Significant	Neither significant or not significant	Not significant	Definitely not significant
Environmental damage					
Harm to animals					
Threat to tourism					
Cost of clean-up					
Unsightliness					
“Normalisation” of smoking					

3. Are there any other significant social, economic, political, environmental or public health effects of cigarette butt litter that are not listed in question two?

4. Has your organisation ever conducted research into the degree or effect of cigarette butt litter in New Zealand?

- Yes
 No

If so, what? (including key findings/reference)

5. Does your organisation have plans or active initiatives that help reduce cigarette butt litter?

- Yes
 No
 Yes but not cigarette related litter specifically

Please describe this initiative:

6. Which would be most effective, considering the potential side-effects of each, in reducing cigarette butt litter in urban areas? Please rank the following options (1= most effective – 6/7= least effective)

- Free “pocket ashtrays” (film canisters or similar) for smokers
 Targeted cigarette waste removal by staff, machines, programmes etc
 “Butt bins” regularly spaced on streets
 Increased policing/enforcing of litter laws
 Smoke-free downtown areas
 Campaigns targeted at smokers encouraging them to stop littering
 Other (please describe)

Why do you think the option(s) you ranked highest would be effective?

Why do you think the option(s) you rank lowest would be least effective?

7. Has your organisation noticed any trends in cigarette butt litter in the last ten years?

- Yes
- No

(If Yes) Please describe the trend:

What causes/factors do you think could be behind this trend?

8. Does your organisation think the Smoke Free Environments Act (banning smoking in licensed premises and workplaces) has increased or decreased the amount of cigarette butt litter on the streets?

- Increased
- Decreased
- Not changed

Comments:

9. Is your organisation associated in any way with the tobacco industry? (eg funding, expert advice, consultations regarding litter etc)

- Yes
- No

If yes, what is the association?

10. Any other comments on cigarette butt litter or documents you could suggest we view?

Thank you very much for your time!

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Appendix Four: Structured Questions for Council Interviews

Cigarette litter questionnaire

Cigarette litter is a component of public litter and also may have significance in other sectors such as health and tourism. We would like to find out about cigarette litter in your region; what efforts you are taking to tackle this issue and your perceptions on other interventions to target this.

- 1) To what extent is cigarette litter an issue within your region?

- 2) Over the last 10 years have you noticed trends in the extent of cigarette litter in your region, and what factors have influenced this?

- 3) Has the smoke free environmental act of 2004 had an impact on the amount of cigarette litter in your area?

- 4) Are there areas of most concern in your area? E.g. beaches, public parks, city streets.

- 5) Are there other consequences associated with cigarette litter in your area? (environmental, tourism, safety, aesthetic, social)

- 6) What is your current policy or plan relating to cigarette litter? NB: Please send us a link to your relevant documents.

5) Has your council/group implemented any interventions to specifically target the cigarette litter problem?

a) What are the interventions?

b) How successful have they been?

c) How has this been measured? Is it documented, and if so, would it be possible to obtain a copy of the document?

c) What funding sources are used?

d) Are there any other interventions you think you might try to implement in the future?

6) To what extent does the local iwi or other local environmental groups provide assistance and support to target the cigarette litter problem?

7) Do you think anti cigarette litter initiatives would be more effective targeted towards particular ethnic or demographic groups?

8) Are you aware of other council's initiatives to reduce cigarette butt litter?

a) Which?

b) Some councils are considering installing 'butt bins' to tackle the cigarette litter problem. What is your impression of this intervention? What do you think are the advantages and disadvantages?

c) Another approach is to create smoke free outdoor areas.

What are your impressions/perceptions of these?

9) Does your council/group work with Keep New Zealand Beautiful (KNZB)?

a) How frequently do you use KNZB services?

b) Which programmes have you been involved in? (cleanup projects, tree-planting, stream restoration efforts, graffiti removal and environmental education programmes designed to inspire children's interest in their environment and motivate community participation)

c) Do you financially support KNZB for anti-littering programmes (specifically cigarette litter)? If so, how much?

10) Are you aware of any links between KNZB and the tobacco industry in New Zealand?

What is your perception of these links?

12) Do you think the tobacco industry should provide funding to Keep New Zealand Beautiful – in particular to fund more cigarette butt bins?

13) Is your council/group associated in any way with the tobacco industry?