

USING INSIGHTS FROM PSYCHOLOGY TO INFORM FUTURE CLIMATE CHANGE REGULATION

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INTRODUCTION

“The climate crisis is both the easiest and hardest issue we have ever faced. The easiest, because we know what we must do. We must stop the emissions [sic] of greenhouse gases. The hardest because [we are] totally dependent on burning fossil fuels... destroying ecosystems in order to create everlasting economic growth” ... “Many people say that we don’t have any solutions to the climate crisis. And they are right. Because how could we? How do you ‘solve’ the greatest crisis that humanity is ever faced?” – Greta Thunberg.¹

Climate change is arguably the most urgent issue humanity is grappling with. At present, there are no simple or guaranteed solutions, however regardless of this, we must act as best we can to combat it. One option is to implement new technologies as they develop. However, technological development takes time – time we do not have. It also relies on the brainpower and innovative thought of only a few people, placing a huge burden on them to ‘save the world.’ Comparatively, a mass action that could be taken to mitigate the climate crisis would be to change human behaviour – to collectively mobilise and redirect the status quo of how we have been living. To do this, an efficient and equitable overhaul of existing ways of living would need to occur. And, for this overhaul to be lasting, not only would behaviour need to change but *norms* held toward climate change would also have to be shifted. This normative change is critical. If new norms regarding the climate and environment were instilled, future climate-related behaviour would be positively dictated; pro-climate norms would guide new pro-climate behaviours.

Law has traditionally been used to change and direct human behaviour. In environmental law, the form law has taken to do so has undergone many metamorphoses. It has shifted from command and control regulation, to market-based regulation, to utilising property rights and voluntarism, to current regulatory flexibility, meta-regulation, pluralistic regulation and collaborative governance.² These shifts in legal architectures have been driven by regulators’ considerations as to what will work best to guide behaviour in terms of effectiveness, efficiency and political acceptability.³

¹ Greta Thunberg “You Did Not Act in Time” (Houses of Parliament, United Kingdom, 23 April, 2019).

² Neil Gunningham “Environment Law, Regulation and Governance: Shifting Architectures” (2009) 21(2) JEL 179 at 209.

³ At 209.

As well as directing behaviour, the law plays a role in promulgating societal norms. Behaviours are external manifestations of internalised norms. Existent norms can be endorsed and promulgated by the law. For example, not only is murder a criminal offence but a generally held pre-existing norm is that killing another human being is wrong. New norms can also be created and reinforced by the law. The legally created norm around not drink-driving (i.e. that it is wrong and dangerous) is one example. Another legally created norm is the anti-tobacco/ anti-smoking norm. However, societal norms which have their genesis in law can only be created if there is initial compliance with that particular law. This presents an interesting 'catch 22' scenario.

Positivists theorise that compliance with the law is dictated by an individual's internal point of view – something in the person's conscience tells them they should, for whatever reason, obey the law.⁴ However, if a particular law seeks to promulgate a norm that is not yet widespread in society, congruency with the individual's internal point of view may not exist. Thus, compliance may not occur. Therefore, that particular law must first seek to appeal to some other, independent aspect of the individual's internal point of view, which can subsequently drive development of the desired norm. A viable existent aspect of the internal point of view of most individuals that may be appealed to is 'societal coordination.' Natural law theorists posit law exists to govern societal coordination, societal coordination being a desirable social goal.⁵ Amalgamating these two jurisprudential theories (though traditionally conceived as conflicting), mainstream compliance with the law indicates societal coordination may currently already exist within many individuals' internal points of view – not only as a social good, but as a norm. When looking at laws that govern traffic, this makes sense. Though pecuniary penalties exist for traffic offences, what drives compliance for many is not the threat of sanction but the necessity of societal coordination to prevent harm (for example, running a red light may result in death) – something far worse than pecuniary sanction. Therefore societal coordination is held not only as a desirable social goal but a normative one also, and may be recognised as driving compliance with the law through the internal point of view in certain contexts. Accordingly, appeals to societal coordination or other pre-existing norms in individuals' internal points of view could be used to justify compliance with laws that seek to promulgate not-yet-widespread norms, such as climate-friendly norms. This would aid with the climate crisis. As the law subliminally advancing pro-climate norms is obeyed for its other reasons such as societal coordination, the pro-climate norm becomes absorbed into the individual's internal point of view and subsequently dictates future action.

In this dissertation, I argue this subliminal changing of norms is precisely what must be done in the context of climate change. Although the changing of norms may not – in fact, probably will not – provide a solution on its own, changing climate norms will provide a platform from which other solutions might be easier to implement. Accordingly, this dissertation explores the interface between law and cultural

⁴ See generally: Leslie Green "Introduction" in HLA Hart *The Concept of Law* (3rd ed, Oxford University Press, Oxford; New York, 2012) at xix.

⁵ John Finnis *Natural Law and Natural Rights* (2nd ed, Oxford University Press, Oxford; New York, 2011) at 83.

norms. It is concerned with regulatory theory, and the methodology employed throughout reflects this. I argue the law can, and should, be used in a top-down fashion to change norms in New Zealand (NZ) to mitigate the effects of climate change. Moreover, I argue a suite of pluralistic legislative measures with this effect should be implemented, and that ‘creeping regulation’ should be used to artificially engineer climate-friendly norms in an omnipresent and ubiquitous way.

Part 1 of the dissertation scans the history of legislative tools used in NZ to combat climate change, concluding the past tools and the current New Zealand Emissions Trading Scheme (NZ ETS) which embody economic and market-based frameworks are ineffective on their own to address the climate crisis. The main reason for this inadequacy is the significant political and legal disjunct in the current legislation for climate change in NZ.⁶ The root of this disjunct can be traced back to industry resistance – particularly from agriculture, towards changing behaviour. This has led to lack of compliance. Moreover, because the legislative framework is economic and targets the behaviour of particular other powerful industries, the industries have lobbied hard against regulation.⁷ Therefore, political contestation has led to subsequent legislative vacillation, legislative amendment and the resultant undermining of original policy objectives. From this, it is clear the economic framework attempting to regulate emitters is not functional. Although industry sectors are significant greenhouse gas (GHG) emitters, before their *behaviour* will change, how they *perceive* their interactions with the climate and environment must be changed. In fact, resistance comes from all sectors in society; we are all contributors. The economic framework therefore overlooks this profoundly social nature of climate change. The foundation of climate change legislation should be addressing climate change as a social issue – i.e. addressing the norms present every actors’ interactions with the climate – before addressing it from an economic perspective. Regulatory acknowledgement of climate change as a social issue will better encourage compliance with any subsequent ‘hard core’ market based or economic frameworks such as the NZ ETS, which currently requires a radical change in behaviour. The threat of radical change often generates both uncertainty and resistance. This reaction should be realised when implementing climate change regulation. Before requiring a radical change in behaviour, changes in norms must occur as an incremental first step.

Parts 2 and 3 of this dissertation establish the law as an appropriate vehicle for the regulation of climate change as a social dilemma. Part 2 uses the jurisprudence of John Finnis and H.L.A Hart to explain how natural and positivist legal theories can be combined to create a cohesive explanation of why law should be used as a regulatory tool in climate change. Part 3 highlights the general challenges faced by legislators when regulating, using Roger Brownsword’s four general challenges (regulatory prudence

⁶ Mark Bracey “New Zealand’s Emissions Trading Scheme: An in-Depth Examination of the Legislative History” (2017) 21 NZ J Env’tl L 133 at 134.

⁷ See for example: Federated Farmers of New Zealand Incorporated “Submission to the Environmental Select Committee on the Climate Change Response (Zero Carbon) Amendment Bill” at 2; Beef + Lamb New Zealand Limited “To the Environmental Select Committee on the Climate Change (Zero Carbon) Amendment Bill” at 3.

and precaution, legitimacy, connection and effectiveness). These challenges highlight the failings of the economic regulatory framework used in the current NZ ETS.

Part 4 explores these regulatory failings of the NZ ETS through the lens of psychology. Part 4.1 identifies the cognitive biases both regulators and regulatees have fallen into due to the unique nature of climate change. How these cognitive traps can be circumvented or even made use of in regulation are explored, and suggestions made based on the insights of Elke Weber. Part 4.2 argues awareness and manipulation of these cognitive biases in climate change regulation is necessary, but not enough. Cognitive biases only take into account the individual, not the group. Therefore, to look only at cognitive psychology in regulating climate change would be to ignore the overwhelmingly social nature of the issue. Part 4.2 asserts that group-level social psychology – particularly Turner and Tajfel’s social identity theory – must be used, manipulated even, to create pro-climate norms through legal regulation. In Part 4.2, the link is also made between the psychological concepts of norms, groups, and social identity theory, and the jurisprudential concepts of the internal point of view, societal coordination, compliance, and democratic society. How these two different fields of study could be theoretically unified to regulate effectively for climate change by pervasively changing norms and attitudes is theoretically suggested.

Part 5 investigates case studies in light of the suggestions made in Part 4. New Zealand’s anti-tobacco campaign is explored as a scenario where a legislatively implemented campaign quietly and subliminally changed norms. Wartime control in Britain is examined as an example of political discourse framing radical regulation as embodying desirable social norms, which led to the acceptance of this regulation. Part 6 applies lessons from these case studies to the context of climate change and explores whether such theoretical regulatory measures making use of insights from psychology should actually be put in place. Brownsword’s regulatory challenges are used as thresholds to undertake this assessment. I conclude that while there may be various legal objections, such a measure should nevertheless be implemented. Final conclusions and suggestions as to future work in this area are then made.

PART 1:

Legislative history in response to climate change

New Zealand has been considering climate measures since 1988, when the NZ Climate Change Programme was established.⁸ However, despite being on the legislative and political agenda for many decades, there remains a significant disjunct between policy aims and what our climate change regulatory tools actually achieve.⁹ In Part 1, NZ's past and current regulatory tools are explored, concluding all have been inadequate to achieve the policy aims. I argue the root of this disjunct is not necessarily the economic framework the regulatory tool is situated in *per se*, but the strong counter reactions of regulatees. I assert these strong political reactions occur due to entrenched norms that make climate-detrimental behaviour acceptable in NZ society.

1.1 Carbon tax

From as early as 1994, a carbon tax was recognised by the government as providing a clear market incentive through a price-based signalling tool to reduce GHG emissions.¹⁰ However, the government did not formally announce any prospective climate change policy until New Zealand ratified the Kyoto Protocol¹¹ in 2002.¹² The prospective climate change policy package included a carbon tax in the form of an emissions charge to be implemented in 2007 and capping the price of carbon at \$25 per tonne of CO₂ equivalent.¹³ Unsurprisingly, the carbon tax met strong opposition from business lobbyists, opposition members of Parliament and consumers, all concerned the tax would make business less competitive.¹⁴ In light of this, the government commissioned a review of the climate change policy package in 2005, undertaking a wide-ranging analysis of existing policy, implications for the domestic economy internationally and options for future policy.¹⁵ Following this review, it was announced the government would not be proceeding with the carbon tax and would consider other ways to ensure that New Zealand's international commitments were met.¹⁶

⁸ Vernon Rive "New Zealand Climate Change Regulation" in Alastair Cameron (ed) *Climate Change Law and Policy in New Zealand* (LexisNexis, Wellington, 2011) 165 at 167.

⁹ Bracey, above n 6, at 134.

¹⁰ Rive, above n 8, at 171.

¹¹ Kyoto Protocol to the United Nations Framework Convention on Climate Change 2303 UNTS 148 (1998) [Kyoto Protocol].

¹² Per Kyoto Protocol art 3.1, NZ committed to reduce all GHG emissions to 1990 levels during the first commitment period from 2008-2012.

¹³ Rive, above n 8, at 172.

¹⁴ At 172.

¹⁵ Ministry for the Environment *Review of Climate Change Policies* (Ministry for the Environment, 2 November 2005).

¹⁶ Rive, above n 8, at 173.

1.2 Negotiated Greenhouse Agreements

Negotiated Greenhouse Agreements (NGAs) were developed in conjunction with the carbon tax. They provided protection for firms or industries that as a result of the carbon tax would face significant risk to overseas competition.¹⁷ The NGAs were legally binding. They partially or fully exempted NGA parties from the carbon tax, conditional upon other measures to reduce GHGs being implemented in accordance with international best practice.¹⁸ To become eligible for an NGA, it was necessary to demonstrate the business or industry was at risk competitively from the impacts of the carbon tax.¹⁹ Only two NGAs were ever negotiated.²⁰ Because they went hand in hand with the carbon tax, when the tax was abandoned, the NGA programme was also abandoned.²¹

1.3 Projects to reduce emissions

Projects to reduce emissions (PREs) aimed to help NZ meet its Kyoto Protocol emissions obligations by providing incentives for projects that would reduce emissions below business as usual during the Protocol's first commitment period.²² The projects were required to take place in NZ, applicants were required to demonstrate that without the incentives available the project would not otherwise proceed, and GHGs emissions abatement needed to be demonstrably above any business as usual scenario.²³ The PREs were successful. Over two years, 17 projects were approved with 9.8 million tonnes of CO₂ equivalent abated.²⁴ However, the 2005 review of climate change policy concluded PREs would not proceed.²⁵ Reasons included difficulty in assessing additionality and that most approved PRE projects involved electricity generation when renewable technologies were becoming more prevalent. There also was doubt as to whether the expected emissions reductions from PREs during the first Kyoto commitment period would exceed the emission units allocated under the PREs.²⁶

¹⁷ Rive, above n 8, at 173.

¹⁸ At 174.

¹⁹ At 174.

²⁰ See Office of the Convenor, Ministerial Group on Climate Change "Review of operation of Negotiated Greenhouse Agreement policy" (18 April 2005) CAB (05)164 at [32]. The first two NGAs were between the New Zealand Refining Company and OceanaGold. Both agreements continued even after the abandonment of the NGA programme. The New Zealand Refining Company agreement has a term until 2022, and the OceanaGold agreement ended in 2012.

²¹ Rive, above n 8, at 175.

²² At 175.

²³ At 176.

²⁴ At 176.

²⁵ At 177.

²⁶ At 176.

1.4 The NZ ETS

The NZ ETS is the current vehicle driving NZ's GHG emissions reductions. Its policy objective is environmental: to incentivise the country's major emitters to cut emissions. It was enacted in 2008 to help NZ meet its international commitments under the UNFCCC²⁷ and serve as the government's primary response to climate change.²⁸ The NZ ETS was intended to operate as a cap and trade system where the government would set a cap on carbon emissions for each sector, and each sector would emit, limited by that cap. Participants within each sector would then pay for their emissions using emissions trading units (the New Zealand Unit, NZU), which participants could trade internationally and domestically among themselves. However, from the outset, no cap on emissions was set by the government; rather, the government relied on the international price of credits to effect behaviour change. This, combined with the generous free allocation of NZUs created a lack of carbon price signal. Accordingly, in spite of the NZ ETS's objective to change participant behaviour through providing a price signal, business as usual continued. There was little price signal and little incentive to reduce emissions.²⁹ As a result, there was little reduction in NZ's overall gross GHG emissions between 2008-2009.³⁰ In 2009 amendments to the NZ ETS were made. The amendments were said by the government to strengthen the scheme, however, from an environmental perspective the opposite effect occurred. The amendments removed the limit on allocated units, reduced the phase-out rate for subsidisation,³¹ provided a 1 for 2 scheme for unit surrender (1 NZU for every 2 tonnes),³² extended agriculture's exemption,³³ and set a cap on the price of NZUs.³⁴ This significantly weakened the carbon price signal. Further amendments occurred in 2012. The 2012 amendments introduced significant free allocation of units to industry, and critically prolonged the changes and exemptions enacted by the 2009 amendments indefinitely.³⁵

The NZ ETS was reviewed in 2015/2016. The main finding of the Review Committee was the NZ ETS had to be modified to more effectively to reach NZ's 2030 and future emissions targets.³⁶ An 'in-principles decision package' resulting from the review was designed, however the aim of the proposals is to improve the credibility of the NZ carbon market and remove barriers to negotiating access to high

²⁷ United Nations Framework Convention on Climate Change A/RES/48/189 (opened for signature 4 June 1992, entered into force 21 March 1994) [UNFCCC].

²⁸ Samuel P Leonard "Commitment Issues: A Critical Analysis of New Zealand's Emissions Trading Scheme" (2015) 19 NZ J Env'tl L 113 at 120.

²⁹ Bracey, above n 6, at 146.

³⁰ Ministry for the Environment "New Zealand's greenhouse gas inventory 1990-2017 Snapshot" (April 2019) INFO 879 at 2. In 2008, NZ's gross GHG emissions were 80.9 Mt/CO₂e and in 2009, NZ's gross GHG were 78.3 Mt/CO₂e, representing little reduction.

³¹ Bracey, above n 6, at 150.

³² At 152.

³³ At 153.

³⁴ At 152.

³⁵ At 161.

³⁶ Office for the Minister for Climate Change Issues "New Zealand Emissions Trading Scheme Review: Improving the ETS Framework" (July 2017) at [7].

quality international units.³⁷ Thus, there is limited environmental focus. Moreover, the package is not set to have any practical effect until the 2020s. And controversially, the question of whether to include agriculture in the scheme was omitted from the terms of the review.³⁸

The NZ ETS is presently being reviewed under the Sixth Labour Government. On 31 July 2019, it was announced the government would begin phasing down industrial allocation of NZUs from 2021. This phase down would take place through two proposals: a minimum phase-down rate applied equally for all industrial activities,³⁹ and a legislated process which could set further phase-down rates for particular industrial activities that have only low risk of emissions leakage.⁴⁰ Additionally, the government have introduced the Climate Change Response (Zero Carbon) Amendment Bill 2019.⁴¹ This Bill would put in place long term targets and provide for 5 yearly carbon budgets.⁴² It would also establish an independent Climate Change Commission which would make policy recommendations.⁴³

With the new government, positive steps have been taken with regard to NZ's climate change regulatory response. Our democratically elected leaders have indicated that climate change mitigation is a high priority. Despite this, none of these new, aspirational legislative proposals – particularly the long-term targets in the Bill – will work, unless the underlying issue is targeted. This underlying issue is that the norms pervading NZ society indicate that everyday climate-detrimental behaviour remains acceptable.

1.5 Analysis of NZ's legislative history and past and current tools in response to climate change

A recurring theme in NZ's legislative strategy for climate change has been emphasising economic and market-based considerations. Alongside obvious environmental objectives, an economic rhetoric has pervaded NZ's climate change regulation. This has been expressed as the need for environmental measures to preserve NZ's trade advantages, be cost efficient and have a net economic benefit to NZ. This focus was illustrated by David Parker's press announcement to abandon the carbon tax:⁴⁴

“Many of our current policies were developed in the 1990s. Since then, New Zealand's economy has boomed, petrol prices have risen and other factors... have changed our situation. It is important that we modify climate change policies in light of this.”

³⁷ At [6].

³⁸ Chris Bramwell “Agriculture left out of emissions review” (25 November 2015) Radio New Zealand <<https://www.rnz.co.nz/news/political/290485/agriculture-left-out-of-emissions-review>>

³⁹ Office for the Minister of Climate Change Issues “New Zealand Emissions Trading Scheme tranche two: a phase-down of industrial allocation” (July 2019) at [3].

⁴⁰ At [38].

⁴¹ Climate Change Response (Zero Carbon) Amendment Bill 2019 (136–1) [Zero Carbon Bill].

⁴² At cl. 5J.

⁴³ At cl. 5A.

⁴⁴ David Parker “Carbon tax will not go ahead in 2007” (press release, 22 December 2005).

The NZ ETS is part of this economic rhetoric. Alongside being NZ's main climate change policy response, the NZ ETS was designed to maximise trade and put NZ into a strong economic position by tapping into the growing market for pro-sustainability goods and services.⁴⁵ The NZ ETS also was designed to prevent emissions leakage.⁴⁶ The 2009 amendments heavily supported these economic aims, particularly those around preserving trade by minimising emissions leakage.⁴⁷ The 2012 amendments reinforced this focus. According to Bracey, the discernible objectives of the 2012 Act involved supporting economic growth and maintaining the costs of the scheme at present levels (contrary to recommendations that the costs of the scheme be incrementally increased),⁴⁸ with little to no reference to reducing GHG emissions levels.⁴⁹

The culmination of the amendments to the NZ ETS present a clear disjunct between the legal and political aims of the NZ ETS.⁵⁰ There is a mismatch between the expressed intentions and objectives underlying the legislation and the provisions as actually enacted.⁵¹ A weak starting point and successive legislative surgeries to the scheme has led to minimal change in NZ's overall gross GHG emissions between 2008-2016 with worrying net increases seen from 2013-2015.⁵² Therefore, despite being announced as a tool to reduce GHG emissions and ameliorate the problem of climate change, the NZ ETS has failed.⁵³

The legislature seem stuck in the false belief that economic and market-based policy tools on their own will be effective to encourage pro-climate behaviour change. This ignores the underlying problem that before these tools can be effective, socio-political resistance to this behaviour change must be overcome. This socio-political resistance lies in the 'hearts and minds' of NZ society; in other words, the resistance is not to the economic tool itself, but to the fact the economic tool so radically proposes to alter the status quo and impact peoples' way of living. Before any radical change can happen, the requisite norms to preface this change must be in place. Successive NZ governments have not paid heed to this requirement. Until recently, the legislature have endorsed a political message of climate ambivalence to the general NZ population whilst simultaneously sending a specific message to ETS participants that protection of their economic interests take precedence over emissions reductions. This political message has passively allowed climate change to continue.

⁴⁵ Bracey, above n 6, at 137 and 156.

⁴⁶ At 138.

⁴⁷ At 138.

⁴⁸ At 168.

⁴⁹ At 168.

⁵⁰ At 169.

⁵¹ At 134.

⁵² Ministry for the Environment, above n 30, at 2. Between 2008-2016 there has been a net change of -2.1 Mt/CO₂e and between 2013-2015 there was a net increase of 0.5 Mt/CO₂e.

⁵³ Bracey, above n 6, at 134.

Due to this entrenched political message promoting the norm that economic interests preside over pro-climate norms and action, it is argued the traditional market-based frameworks will not longer be effective on their own in reducing NZ's GHG emissions. The economic rhetoric inherent in market-based frameworks signals to industry and NZ ETS participants that negligible pro-climate action is permissible. It has set a precedent that half-hearted reduction efforts will not be penalised, but covertly supported through weak legislative provisions. And it has allowed business to continue as usual for the most part. Cumulatively, these messages have created contestable political ideologies as to whether climate change regulation is even needed. This engenders more resistance to the idea of *any* climate change regulation, and resistance from economic sectors with considerable political power in particular causes vacillation within Parliament. Accordingly, it is time to urgently implement legislative tools which address climate change as a regulatory issue through a different lens. Climate change must be regarded as a social dilemma caused by deeply entrenched group-level societal norms, which have coloured subsequent interactions and relationships with the environment.

PART 2:

The law as a necessary tool: using ‘creeping regulation’ to change societal norms

While Part 1 illustrated the inadequacy of an economic framework for climate change regulation in isolation, Part 2 argues the law is necessary in changing deeply entrenched societal norms. Jurisprudential theory will be used to explain this, by reference to Hart’s positivist internal point of view and Finnis’s natural law theory – particularly the role of law in societal coordination. Although representing opposing jurisprudential schools of thought, I argue Finnis’s role of the law in societal coordination is an aspect of Hart’s internal point of view. Specifically, I argue societal coordination is not only a desirable social good, but a societal norm which drives compliance with the law by forming part of individuals’ internal point of view. Accordingly, I assert that if other norms (such as pro-climate norms) can become part of individuals’ internal point of view, compliance with any subsequent law made congruent with these norms will naturally follow.

A key element of Hart’s positivism is the internal point of view. The internal point of view is the attitude people hold towards the rule and relates to compliance with the rule.⁵⁴ If an individual’s internal point of view is congruent with the rule, they will obey it and view it as binding due to the alignment of the law and their internalised norms. If an individual’s internal point of view does not align with the rule, they are less likely to obey it. And for those who in fact do not obey, the law provides a sanction. Fear of sanction then steps in to encourage the compliance of those whose internal point of view is incongruent with the law.⁵⁵ Hart’s internal point of view also operates as a reference point for individuals. It provides the norm, or standard, on which self and other’s actions will be judged. It forms the basis for explaining one’s own acts and judging or criticising others’ acts when they do not align with one’s internal point of view.⁵⁶ Therefore, it acts as a comparative mechanism, allowing us to question why (or why not) we should obey the law. This comparison referenced against our internal point of view then allows us to amend our norms which dictate compliance. This relates to the ultimate function of the internal point of view: it provides a framework for accepting a rule or set of rules as it enables an individual to consider how other people act by observing their actions and the reasons given to justify them.⁵⁷

⁵⁴ HLA Hart *The Concept of Law* (3rd ed, Oxford University Press, Oxford; New York, 2012) at 88.

⁵⁵ At 88.

⁵⁶ At 88.

⁵⁷ At 89.

I argue one constituent of an individual's internal point of view which prompts obedience with the law is Finnis' social good of societal coordination.⁵⁸ In other words, individuals obey the law and see it as binding as it aligns with this norm in their internal point of view. This pre-existent norm of societal coordination governs the way the law currently works in society. In the introduction, I gave the example of traffic laws. We do not run red lights due to the norm of societal coordination. Moreover, as a social good, societal coordination prevents unnecessary death. To coordinate any society, a cohesive suite of regulation needs to exist to distribute the burdens and benefits of the law evenly. In this way, the law is a seamless web of rights and duties that connect us.⁵⁹ We cannot pick and choose the burdens we bear or benefits we accrue as this would break the seamless web of the law.⁶⁰ The law allocates these burdens and benefits to us and in this way, societal coordination is achieved.⁶¹ This norm has been accepted in modern society, and we mostly accept the impingement of certain liberties in exchange for social order.

In certain contexts, the social value of societal coordination often takes precedence over absolute individual liberty, making it a norm to sacrifice some autonomy for the sake of coordination.⁶² However, one area of the law where the norm of societal coordination as a social good has not necessarily impacted the internal point of view to drive compliance is in the realm of environmental law. This is seen through the NZ ETS. Although compliance with the NZ ETS would have been best for societal coordination and socio-environmental order, participants were unwilling to comply. They viewed their own economic best interests as trumping the collective social good. In this way, the seamless web of the law has been torn. Various industries continue to reap the monetary benefit of emissions-heavy activities with none of the burden of internalising the costs of their emissions. Moreover, the legislature have simply let this happen. Through the various ETS amendments, the web of the law has been broken as the legislature have allocated none of the burdens yet allowed the benefits to accrue to emitters. This has endorsed the norm that the role of the law with regards to the environment is not societal coordination, but individual pecuniary gain. Accordingly, societal coordination has not been seen as operating in individuals' internal points of view in the climate change context. And the legislature has allowed, even endorsed, this phenomenon.

As evident, the norm of societal coordination is not enough on its own to drive compliance with environmental or climate law, particularly when this law is enacted through an economic market-based paradigm. Accordingly, a new type of regulation must occur in the climate change context to instil new norms that subsequently encourage or drive societal coordination for the purpose of climate change. This type of regulation can be termed "creeping regulation" – regulation that unlike traditional forms is

⁵⁸ Finnis, above n 5, at 83 and 153.

⁵⁹ John Finnis "The Authority of Law in the Predicament of Social Contemporary Theory (Symposium on Law & Morality)" (1984) 1 Notre Dame JL Ethics & Pub 115 at 120.

⁶⁰ At 120.

⁶¹ At 120.

⁶² At 120.

not overt, but rather covert; that creeps up on regulatees without them realising or knowing. Through creeping regulation, pro-climate norms could be subliminally embedded in individuals' internal points of view. The internalised pro-climate norms would then work alongside the existing norm of societal coordination to encourage compliance with subsequent 'hard core' climate change regulation.

PART 3:

Regulatory challenges in the climate change problem

Part 2 established the role law plays in society, how it interacts with individuals' norms and why it is necessary for climate change. However, the challenges of 'creeping regulation' in the context of climate change cannot be overlooked. Part 3 introduces Brownsword's four regulatory challenges – regulatory prudence and precaution, regulatory legitimacy, regulatory effectiveness, and regulatory connection,⁶³ as thresholds any regulation must meet to fulfil its desired objectives and be fit for purpose. I address each concept below. Employing these thresholds helps explain the failings of the NZ ETS and enables lessons to be drawn in relation to my proposal for 'creeping regulation,' regarding what lacunae exist in the current regulatory scheme and what role creeping regulation can consequently play.

3.1 Regulatory prudence and precaution

The concept of 'regulatory prudence and precaution' requires regulators to take sensible precautionary measures relative to the risks presented.⁶⁴ These thresholds have arguably been surpassed in the context of climate change. Climate change risks are no longer mere supposition, having turned into attributable consequences such as sea level rise and severe weather events.⁶⁵ Because of this reality, prudence and precaution are no longer issues for regulators in the climate change sphere – we have moved beyond possibility and risk into definitive certainty.

3.2 Regulatory legitimacy

'Regulatory legitimacy' is the procedure taken to determine the policy aims, whether the aims are legitimate and whether the means chosen to implement the aims are legitimate.⁶⁶ Scientific experts are often used to help determine these aims by presenting fact and statistics in terms of what is a feasible policy aim, and what is required to achieve the ends desired by regulators.⁶⁷ The United Nations Intergovernmental Panel on Climate Change (UN IPCC) Reports are regarded as providing authoritative international scientific agreement as to the causes, consequences, and possible mitigatory

⁶³ Roger Brownsword. "Four Key Regulatory Challenges" *Law the Technologies of the Twenty- First Century* (Cambridge University Press, Cambridge, 2012) at 5.

⁶⁴ At 136 and 165.

⁶⁵ United Nations Intergovernmental Panel on Climate Change *Global warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and effort to eradicate poverty* (Intergovernmental Panel on Climate Change, Geneva, October 2018) at 9.

⁶⁶ Brownsword, above n 63, at 172.

⁶⁷ At 174.

measures for the climate crisis. Thus, the IPCC Reports provide legitimacy to regulators' policy aims around climate change. However, whether the means used to implement any climate change regulation are legitimate must still be assessed.⁶⁸ This turns both on what the means actually are, and the standard of legitimacy applied.⁶⁹ The least demanding standard of legitimacy is that regulators act within their agreed competencies,⁷⁰ that is, that they act *intra vires* and within their constitutional bounds. The most demanding standards of legitimacy are whether the means are ethically defensible and appropriate.⁷¹ As per Part 2, the law plays a role in societal coordination and whether people comply with the law corresponds to the law's congruency with norms held in individuals' internal points of view. However, should the law be used to change people's internal norms? Would creeping regulation meet the test of regulatory legitimacy? In the context of climate change, to change an individual's norms to pro-climate norms seems radical. However, the law has been used in this way before. For example, NZ's anti-tobacco campaign and wartime control in Britain. Therefore, in certain contexts, the use of law to change norms has already been accepted as legitimate in society. Part 5 explains these case studies in more detail and justifies climate change as a legitimate context in which the law should be used to change norms.

3.3 Regulatory effectiveness

'Regulatory effectiveness' is the concept that regulation must fulfil its intended outcome to be effective.⁷² For this intended outcome to occur, regulators must have in mind desired effects and intentions for the regulation, deriving from policy aims and objectives formulated in response to a discernible problem.⁷³ In climate change, regulatory effectiveness presents a unique challenge. Though there is an intended outcome in line with policy aims: reducing GHG emissions to sustainable levels, this is still a broad goal and regulators do not know exactly what form regulation must take to be effective.

The NZ ETS would be considered a regulatory failure in terms of Brownsword's threshold of regulatory effectiveness. As established, the NZ ETS has failed because Parliament have allowed a disjunct between the ETS's legal and political aims to persist, having even encouraged it the 2009 and 2012 amendments. However, the NZ ETS has also failed due to the response of regulatees to the regulation. There has been significant industry resistance to the NZ ETS. This has led to subsequent vacillation regarding the legislative aims and amendment to the substance of the NZ ETS, whilst the purpose of GHG emissions reductions becomes almost a façade. Accordingly, regulatory failure is a result of unsuccessful interaction between regulator and regulatee. However, this regulatory failure does not

⁶⁸ Brownsword, above n 63, at 176.

⁶⁹ At 178.

⁷⁰ At 178.

⁷¹ At 179.

⁷² At 271.

⁷³ At 271.

arise in a vacuum. Surrounding the regulator and regulatee are external factors.⁷⁴ One pertinent external factor in the context of climate change are the current climate-ambivalent or climate-detrimental norms held by a large proportion of the industries Parliament is trying to regulate. At a microscopic level, the norms are held by the many individuals constituting the industry and their supporters. Cumulatively, this has led to group-level resistance of the political aims that were hoped to be achieved through the NZ ETS. This has also led to the creation of two partisan camps: those who hold climate-ambivalent or climate-detrimental norms and are against climate change regulatory measures, and those who hold pro-climate norms and are for climate change regulation.

For any regulation to be effective, the norms of those in the climate-ambivalent/climate-detrimental camp will have to be shifted to pro-climate norms. This will eliminate a significant external factor contributing to regulatory failure in the climate change context. Shifting norms will decrease resistance to other 'hard-core' climate change regulatory measures Parliament implements (such as the NZ ETS, or other market-based economic tools). And, to shift these norms uniformly, the precursory use of creeping regulation to promulgate pro-climate norms in the law should occur, as established in Part 2.

3.4 Regulatory connection

For regulation to have 'regulatory connect,' a nexus must be made between the problem and the proposed regulation; the regulation must then actually be connected, and the regulation must stay connected to the problem.⁷⁵ Arguably in the NZ climate change regulatory context, there is limited regulatory connect.

New Zealand's climate change regulatory history indicates that despite the government purportedly recognising climate change as a problem requiring regulation since 1988,⁷⁶ no real nexus has been made. Any recognition of the need to regulate for the climate has always been qualified by the need to preserve economic wealth. Therefore, no unconditional nexus has been made between the problem and the need to regulate: other factors have always been taken into account. Consequently, any regulation that does arise is weakened, as the original nexus between the problem and the regulation is always conditional upon other factors. Any resulting actual regulatory connection is weak, which then makes it harder for it to stay connected.

The NZ ETS highlights this problem. The NZ ETS has never been truly regulatorily connected as it has never sincerely sought to achieve its policy aims. When enacted in 2008, though a scheme to reduce GHG emissions, strong additional objectives were also to maximise trade and put NZ in a strong

⁷⁴ Brownsword, above n 63, at 272.

⁷⁵ At 371.

⁷⁶ Rive, above n 8, at 167.

economic position.⁷⁷ The NZ ETS was therefore not enacted as a piece of unconditional environmental regulation in its own right. These correlative aims of the NZ ETS weakened the connection between the problem and the proposed regulation – creating a disjunct between legal and political aims.⁷⁸ The subsequent amendments shifted the NZ ETS further from the original policy goal. Though the current government is trying to amend the problem of regulatory connect through the present review of the NZ ETS and the proposed Zero Carbon Bill, Brownsword states that once regulation becomes disconnected regulatees cannot be sure where they stand.⁷⁹ This creates difficulties as the law is no longer certain and it becomes wasteful to declare the regulatory position is as it was intended to be.⁸⁰

Accordingly, I argue the NZ ETS can no longer be the sole regulatory vehicle to reduce GHG emissions. It would be improvident to continue in this vein, especially given the ETS's ineffectiveness and lack of regulatory connect for the past decade. If there is to be any real regulatory connect, where a clear and enduring nexus is made between climate change and the need for regulation, a change of tact is necessary from Parliament. Moreover, for there to be regulatory effectiveness, Parliament must regulate in a more pluralistic way which considers the climate change dilemma from a social rather than purely economic perspective. The creeping regulation proposed in Part 2 which seeks to change norms present in regulatees' internal points of view is what is required. By pervasively changing norms from climate-ambivalent/climate-detrimental to pro-climate, creeping regulation makes clear to regulatees the nexus between the problem (climate change) and regulation. This means that when any subsequent regulation is enacted it has automatic regulatory connection as the nexus between the problem and regulation is understood, and compliance will be more likely.

⁷⁷ Bracey, above n 6, at 138.

⁷⁸ At 134.

⁷⁹ Brownsword, above n 63, at 419.

⁸⁰ At 419.

PART 4:

The psychology of regulating for climate change

Part 2 indicates the necessity of the law as a tool for creeping regulation. Part 3 assesses the shortfalls of the NZ ETS with reference to Brownsword's regulatory challenges. It also indicates how creeping regulation may bridge these shortfalls, particularly in terms of regulatory connection and regulatory effectiveness.

In this part, cognitive psychology will be used to explain the unique challenges of climate change and the biases regulators and regulatees have fallen into as a result, per the literature of Weber. These biases will be used to explain the regulatory failure of the NZ ETS. How these cognitive biases could be manipulated for use in climate change regulation will then be outlined. However, it will be concluded that utilising cognitive bias on its own is limited without regard to the group-level context of climate change regulation. Accordingly, social psychology will be introduced as a way to make use of these biases, but through the group-level social identity theory (SIT).⁸¹ The SIT will be posited as the mechanism underlying creeping regulation, in order to justify its potential effectiveness as a regulatory tool in the climate change context.

4.1 Cognitive psychology

Cognitive psychology is the study of the mind as an information processing system and how mental processes influence behaviour.⁸² These mental processes affect our subconscious and conscious decisions and behaviours. Kahneman describes these processes as belonging to either System 1 (S1) or System 2 (S2).⁸³ S1 operates automatically and quickly, with little or no effort, and no sense of voluntary control.⁸⁴ We may be unaware of S1's operation. Conversely, S2 allocates attention to effortful mental activities.⁸⁵ These are the decisions we are aware of that involve elements of choice,

⁸¹ See: Henri Tajfel and John Turner "An integrative theory of intergroup conflict" in WG Austin & S Worchel (eds) *The social psychology of intergroup relations* (Brooks/Cole, Monterey CA, 1979) ; Henri Tajfel "La catégorisation sociale" in S. Moscovici (ed) *Introduction à la psychologie sociale* (Larousse, Paris, 1972) (translation: "Social Categorisation" in *Introduction to Social Psychology*); John Turner "Social comparison and social identity: some prospects for intergroup behaviour" (1975) 5 *EJSP* 5 as cited in Vincent Yzerbyt and Stéphanie Demoulin "Intergroup Relations" in ST Fiske, DT Gilbert & G Lindzey (eds) *Handbook of Social Psychology: Volume II* (5th ed, John Wiley & Sons Inc., Hoboken NJ, 2010) 1024 at 1029.

⁸² Carol Brown "The Basics of Cognitive Psychology" in *Cognitive Psychology* (1st ed eBook ed, SAGE London, c2007) at 1.1.

⁸³ Daniel Kahneman *Thinking, fast and slow* (1st ed, Farrar, Straus and Giroux, New York, 2011) at 20.

⁸⁴ At 21.

⁸⁵ At 22.

agency and concentration.⁸⁶ S1 automatically generates feelings, suggestions and intuitions for S2.⁸⁷ If endorsed by S2, intuitions turn into beliefs and impulses turn into voluntary action.⁸⁸ A lazy S2 will therefore accept the information S1 provides without question.⁸⁹ In any situation both S1 and S2 work, however when their outputs disagree, S1 will usually prevail as it has greater vividness and emotional salience.⁹⁰ Moreover, the use of S2 to override, reason or rationalise the intuitions of S1 is effortful – something most people will try to avoid if S1 provides an automatic answer.⁹¹ This relationship between S1 and S2 leads to general cognitive tendencies seen in the majority. The cognitive tendencies which may explain the resistance or reticence of regulatees towards climate change policy are explained by Weber,⁹² and can be applied to the NZ ETS to better understand its regulatory failure. Importantly, Weber’s cognitive tendencies apply to both regulatees and regulators.

4.1.1 Insufficient visceral reactions to environmental risks

The feeling of fear powerfully motivates us to remove ourselves from a dangerous situation.⁹³ This is an S1 process – automatic, involuntary and physiologically driven. However, because the consequences of climate change, though catastrophic, are not immediate, the feeling of fear does not arise.⁹⁴ Even if fear does arise, the emotion is not as salient or intense as it is a future emotion, compared to the instant visceral reaction one would get in the situation of being chased by a tiger, for instance.⁹⁵ Accordingly, without sufficiently strong visceral reaction to the risk of climate change, people may not be motivated to take corrective or evasive actions.⁹⁶ Moreover, as Weber explains, appeals to fear are problematic beyond the fact that people do not naturally worry about climate change.⁹⁷ People appear to have a finite pool of worry,⁹⁸ meaning they have a limited amount of cognitive space to worry about certain things so must pick and choose what to worry about at any given time. Individuals simply may not wish to allocate climate change any room in their pool of worry, and if

⁸⁶ Kahneman, above n 83, at 23.

⁸⁷ At 23.

⁸⁸ At 25.

⁸⁹ At 25 and 41.

⁹⁰ Elke Weber “Doing the right thing willingly: using the insights of behavioural decision research for better environmental decisions” in E Shafir (ed) *The Behavioural Foundations of Public Policy* (Princeton University Press, Princeton; Oxford, 2013) 380 at 381.

⁹¹ Kahneman, above n 83, at 41.

⁹² Weber, above n 90, at 381.

⁹³ George Loewenstein and others “Risk as feelings” (2001) 127 *Psychol* 267 as cited in Weber, above n 90, at 382.

⁹⁴ Weber, above n 90, at 382.

⁹⁵ At 382.

⁹⁶ At 382.

⁹⁷ At 328.

⁹⁸ Elke Weber and Eric Johnson “Constructing preferences from memory” in S Lichtenstein and P Slovic (eds) *The construction of preference* (Cambridge University Press, New York, 2006) 397 as cited in Weber, above n 90, at 382.

they do, it comes at the cost of displacing worry about other issues.⁹⁹ Secondly, appeals to fear instigate the single action bias (SAB).¹⁰⁰ SAB occurs when people take a single action in response to a fear signal and their worry dissipates, even if a broader set of actions may have been called for.¹⁰¹ If taking one action to respond to a problem seems to remove the feeling of worry or concern, appeals to fear may backfire through motivating people to take only singular or simpler actions than are necessary to really address the problem.¹⁰²

Applying insights from this cognitive tendency to the NZ context highlights the problem with using only the NZ ETS market-based framework to regulate for climate change. By using only the NZ ETS, SAB has arisen in the regulators. Moreover, Weber states individuals do not naturally worry about climate change.¹⁰³ Accordingly, it is easy for the company boards of ETS regulatees to discount climate change as a worry. This is especially so when there are other competing, immediate worries and the consequences of climate change are not saliently or immediately viscerally felt. In other words, pro-climate norms are not part of individuals' cognitive considerations when making decisions that have environmental impact. These normative cognitive considerations relate to Hart's internal point of view. Both concepts dictate compliance with the rules, and both require the embodiment of a particular norm for a particular behavioural outcome. In the context of climate change, without this preliminary internal pro-climate norm, there will arguably always be insufficient visceral reactions to environmental risks. Environmental risks are not something we have traditionally considered; moreover, their consequences are temporally delayed thus not emotionally salient. Accordingly, the implementation of an economic market-based regulatory approach on its own, which does not prompt a salient visceral reaction to environmental risk or create pro-climate norms, will rarely generate the desired behaviour in the context of climate change. Moreover, the threat of pecuniary penalties in market-based regulatory approaches are too easily absorbed by powerful industry sectors. The critical absence of internal pro-climate norms means there are no strong intrinsic motivation for regulatees to comply.

4.1.2 Cognitive myopia, loss aversion and hyperbolic time-discounting

Weber identifies cognitive myopia, loss aversion and hyperbolic time discounting as heuristic biases that influence how the desirability of possible choices in the environmental context are judged.¹⁰⁴ These heuristic tendencies create bias as rational S2 attempts to consider the future long-term benefits and utility of a particular choice, action or decision, but gets overruled by S1 which is trying to avoid immediate loss.

⁹⁹ Weber, above n 90, at 383.

¹⁰⁰ At 383.

¹⁰¹ At 383.

¹⁰² At 383.

¹⁰³ At 382.

¹⁰⁴ At 383.

Cognitive myopia is the failure to integrate the outcomes of a series of decisions that should be considered in combination.¹⁰⁵ It prevents people from accurately perceiving the future benefits of immediate costs or of reductions in immediate benefits,¹⁰⁶ and can be explained in the context of loss aversion.¹⁰⁷ Loss aversion is where people seek to avoid losses rather than make gains.¹⁰⁸ Cognitive myopia and loss aversion work together in that by seeking to avoid short-term loss, individuals are myopic to the future long-term benefits of any immediate loss.¹⁰⁹ The concept of hyperbolic time-discounting also works in this construct whereby sharp discounts are applied to the costs or benefits that will occur at some point in the future,¹¹⁰ further rendering the consideration of long-term benefits myopic.

These three biases can be applied to the NZ ETS. Because the NZ ETS is an economic market-based tool, any loss associated with the ETS is also economically coloured. The NZ ETS is framed in terms of loss – what industry participants will have to give up in order to meet their allocated NZUs. Therefore, loss averse participants are unlikely to want to give up anything to comply with the NZ ETS. This is especially so when loss aversion is combined with cognitive myopia as to the consequences of climate change and this myopia is reinforced by hyperbolic time-discounting which makes mitigatory action unattractive due to the immediate sacrifice required with uncertain, non-immediate benefits.¹¹¹ An insufficient visceral reaction to the environmental risk further operates as an overarching factor. Regulators have also fallen prey to these three biases. Though the NZ ETS sought to make the risk of climate change salient to industries through using a price signal, subsequent amendments eroded this salience, implying the legislature viewed climate change as a future, distant issue. This increased the tendency for persistent cognitive myopia around climate change. The legislature also illustrated loss aversion through the introduction of free allocation of units and the 1 for 2 scheme to prevent economic loss. Moreover, the indefinite timeframe for these measures indicate the legislature sharply and hyperbolically discounted the future social and environmental benefits of pro-climate action against the short-term economic cost of these actions.

¹⁰⁵ Daniel Read, George Loewenstein and Matthew Rabin “Choice bracketing” (1999) 19 J Risk Uncertain 171; Richard Thaler and Eric Johnson “Gambling with the house money and trying to break even: The effects of prior outcomes on risky choice” (1990) 36 Manage Sci 643, as cited in Weber, above n 90, at 383.

¹⁰⁶ Weber, above n 90, at 383.

¹⁰⁷ Shlomo Benartzi and Richard Thaler “Myopic loss aversion and the equity premium puzzle” (1995) 110 Q J Econ 643 as cited in Weber, above n 90, at 383.

¹⁰⁸ Weber, above n 90, at 384.

¹⁰⁹ At 383.

¹¹⁰ George Ainslie “Specious reward: A behavioral theory of impulsiveness and impulse control” (1975) 82 Psychol 463 as cited in Weber, above n 90 at 384.

¹¹¹ Weber, above n 90 at 385.

4.1.3 Useful cognitive psychology insights for climate change and their limitations

Despite cognitive myopia, loss aversion and hyperbolic time discounting biasing both regulators and regulatees in the context of climate change, these three biases may be able to be manipulated in a useful way for future regulation.

Social comparison and regret can be used to circumvent cognitive myopia, loss aversion and hyperbolic time-discounting.¹¹² Social comparison is the use of other people as a relative reference point for an individual's decision.¹¹³ It works with regret theory,¹¹⁴ which assumes people make social comparisons both before and after a choice is made. The theory posits social comparisons are incorporated into the original decision of what to do in anticipation of later social comparisons where an individual will feel positive if they have fared well compared to other individuals but negative if they have fared worse. Regret theory explains why feeling regret after having made a 'bad' decision is seen as having worse consequences than a 'good' or neutral decision which may have had consequences equally as bad.¹¹⁵ In the context of climate change regulation, this feeling of strong regret can be used to improve decisions and may be invoked by the content of regulation.¹¹⁶ For example, regulation that encapsulates the sense of extreme anticipated regret that might occur if human habitability of planet earth were to become compromised by failure to take action can motivate regulators and regulatees to make pro-environmental decisions.¹¹⁷

It must be noted, anticipated regret can only work if the potential loss is salient to regulators and regulatees. Without this loss being salient, regret may not be felt as keenly, or at all, to influence a particular decision. One may speculate through the amendments to the NZ ETS that our regulators have not yet felt an anticipated sense of extreme regret that is strong enough to counter the desire to preserve economic loss. Essentially, there is still an insufficient visceral reaction to environmental risks in NZ. I argue this insufficient visceral reaction to environmental risk in NZ continues to occur because there is not a group-level culture of pro-climate norms to make this risk salient. Without these pro-climate norms acting, the relevant norm remains economic. Therefore although Weber posits social comparison and regret as a remedy for cognitive myopia, loss aversion and hyperbolic time-discounting,

¹¹² Weber, above n 90, at 387.

¹¹³ At 387.

¹¹⁴ David Bell "Regret in decision making under uncertainty" (1982) 30 Oper Res 961; Graham Loomes and Robert Sugden "Regret theory: An alternative theory of rational choice under uncertainty" (1982) Econ J 805 as cited in Weber, above n 90, at 387.

¹¹⁵ Elke Weber "From subjective probabilities to decision weights: The effect of asymmetric loss functions on the evaluation of uncertain outcomes and events" (1994) 115(2) Psychol 228 as cited in Weber, above n 90 at 388.

¹¹⁶ Weber, above n 90, at 388.

¹¹⁷ At 388.

the utility of social comparison and regret is limited by the fact NZ society has not yet embodied pro-climate norms.

Alternatively, framing may be a more useful cognitive psychology insight for climate change regulation to minimise regulatees' cognitive biases. Framing shifts an individual's perspective in a way that changes their subjective relative evaluation of choice options.¹¹⁸ This can bring about a change in perspective which can dramatically alter an individual's choice selection.¹¹⁹ In the NZ regulatory context, climate change regulation has typically been framed by substantive reference to the economy through the use of market-based regulatory tools. This has limited individuals' visceral reactions to environmental risks, which has consequently led to cognitive myopia, loss aversion and hyperbolic time-discounting regarding environmental decisions. Therefore, climate change regulation must not be framed through economic loss but in terms of gaining social wealth by preserving human (and non-human) life. Giving regulation this social content is important. It clears cognitive myopia, as human and social wellbeing are considered in concert with economic wellbeing when making environmental decisions. It also increases the likelihood of sufficiently visceral reactions to climate change as the regulation is framed in terms of *human cost/benefit*.

Framing climate change regulation in a humanistic, social way also focuses decisions from individuals to groups.¹²⁰ The use of group identity turns the regulatee from a solitary unit into a member of a group that can be induced to make decisions from very minimal manipulations.¹²¹ Cultures that emphasise the importance of affiliation and social goals over autonomy and individual goals have been shown to influence the way in which decisions under risk and uncertainty get made due to the socialisation process, and what is made salient to an individual.¹²² However, emphasis on social goals and affiliation does not take place by tapping into the cognitive tendencies of individuals in isolation. Emphasis on social goals and affiliation can only take place within the wider societal context; here, the social context of climate change and the social nature of regulatees must be taken into account. Accordingly, framing is limited.

One main limitation of framing is that it assumes individuals already consider themselves part of the collective ingroup and so will respond if regulation is framed collectively. Even if regulation is framed in terms of a collective ingroup, the regulatee will only respond if the norms of that ingroup are congruent with their own norms – their internal point of view. In other words, 'regulatory connection' will only occur

¹¹⁸ Danie Kahneman and Amos Tversky "Choices, values and frames" (1984) 39(4) Am Psychol 341 as cited in Weber, above n 90, at 387.

¹¹⁹ Weber above n 90, at 387.

¹²⁰ At 388.

¹²¹ Marilyn Brewer "In-group bias in the minimal intergroup situation: A cognitive-motivational analysis" (1979) 86 Psychol 307 as cited in Weber, above n 90, at 388.

¹²² Elke Weber and Christopher Hsee "Cross-cultural differences in risk perception, but cross-cultural similarities in attitudes towards perceived risk" (1998) 44 Manag Sci 1205 as cited in Weber, above n 90, at 388.

if regulatees have normatively embodied the nexus between the problem and the regulation, regardless of how this regulation is framed. Accordingly, pro-climate norms must be embodied in individuals' internal points of view before compliance with climate change regulation will occur.

Thus, I argue that though cognitive psychology has some use in regulation – mainly to inform its content through social comparison, regret and framing – insights from *social* psychology may be more useful in resolving the persistent issues of 'regulatory connect' and 'regulatory effectiveness.' This is because using social psychology in regulation gives insight as to how group-level cultural norms are formed. Social psychology can inform the mechanism of climate change regulation, which I argue should manipulate group-level interactions to facilitate the promulgation of pro-climate norms through creeping regulation.

4.2 Social psychology

Social psychology studies how others influence our behaviours and thoughts.¹²³ How we live and interact with each other is profoundly social.¹²⁴ And, it is precisely how we have traditionally lived and interacted that has caused climate change.¹²⁵ The norms embodied by almost all groups around the world have been of high consumption, high waste and high emissions.¹²⁶ To effectively regulate for climate change, the complex group-level dynamics that have driven these norms must be understood.

4.2.1 Social identity theory

Social identity theory¹²⁷ (SIT) is regarded as the leading explanation for group-level behaviour. Social identity theory is premised on three constructs: categorisation, social identity and comparison.¹²⁸ Categorisation is the identification of self and non-self elements and results in 'us' and 'them' groups.¹²⁹ Social identity is the identity we derive from the shared norms and behaviours of the group we identify with; and comparisons arise between groups after categorisation has occurred and a social identity is adopted.¹³⁰ When categorising, forming social identity and comparing groups, the assumption is that

¹²³ Lee Ross, Mark Lepper and Andrew War "History of Social Psychology: Insights, Challenges and Contributions to Theory and Application" in ST Fiske, DT Gilbert & G Lindzey (eds) *Handbook of Social Psychology: Volume I* (5th ed, John Wiley & Sons Inc., Hoboken NJ, 2010) 3 at 3.

¹²⁴ Adam Pearson and Jonathon Schuldt "Climate change and intergroup relations: Psychological insights, synergies and future prospects" (2018) 21(3) GPIR 373 at 373.

¹²⁵ See generally Intergovernmental Panel on Climate Change *Climate Change 2013 The Physical Science Basis* (Cambridge University Press, Cambridge, United Kingdom, 2013); Samuel Alexander "Degrowth implies Voluntary Simplicity: Overcoming Barriers to Sustainable Consumption" (Simplicity Institute, Simplicity Institute Report 12b, 2012); Pearson and Schuldt, above n 124, at 374.

¹²⁶ Samuel Alexander "Degrowth implies Voluntary Simplicity: Overcoming Barriers to Sustainable Consumption" (Simplicity Institute, Simplicity Institute Report 12b, 2012) at 1.

¹²⁷ Yzerbyt and Demoulin, above n 81, at 1029.

¹²⁸ At 1029.

¹²⁹ At 1029.

¹³⁰ At 1029.

individuals have an inherent need to evaluate the self positively.¹³¹ This is otherwise known as maintaining positive self-esteem. It is suggested that group members engage in comparisons with members of other relevant groups to evaluate their respective social identities.¹³² Comparisons of the self in favour of the 'ingroup,' the group most individuals aspire to be part of, lead to attaining a positive social identity thus positive self-esteem.¹³³ However comparisons of the self in favour of the 'outgroup' lead to a negative social identity thus poor self-esteem.¹³⁴ Therefore, to increase self-esteem individuals seek to become members of the ingroup.¹³⁵

Whether a group is the ingroup depends on a number of factors. Groups emerge out of people's common perception of themselves as members of the same social unit and in the various relationships they have to one another within that unit.¹³⁶ Associated with these perceptions are various group products such as slogans, norms and values which become internalized and serve to guide behaviour.¹³⁷ When the social unit constitutes the majority of the population and there is consensus as to the group products, that group becomes the ingroup. Other factors which then influence the ingroup are cultural context, the population at hand, the source of the group products, and the importance of the common task perceived by the ingroup.¹³⁸ Notably, individuals may be members of many different groups.¹³⁹

4.2.2 Application of SIT to climate change in NZ

Presently in NZ, there are two apparent groups regarding climate change regulation: those who believe radical change is necessary and those who are ambivalent or want to preserve the status quo. This is evident when looking at the discourse around agricultural regulation. Agriculture contributes to 48% of NZ's total emissions profile,¹⁴⁰ with methane gas from ruminant enteric fermentation contributing to 34.2% of this.¹⁴¹ Evidence therefore indicates there needs to be change within the agriculture industry, particularly dairy and beef farming, to reduce NZ's GHG emissions. However, the prospect of change has created an ingroup/ outgroup rhetoric within NZ society. Until recently, there was a twenty-year standoff between Parliament and the Federated Farmers Association regarding 'user-pays for'

¹³¹ Yzerbyt and Demoulin, above n 81, at 1029.

¹³² At 1029.

¹³³ Michael Hogg and Dominic Abrams "Comments on the motivational status of self-esteem in social identity and intergroup discrimination" (1988) 18 EJSP 317 at 318.

¹³⁴ At 318.

¹³⁵ At 318.

¹³⁶ Rupert Brown *Group Processes* (2nd ed, Blackwell Publishing, Malden; Oxford; Victoria, 2010) at 20.

¹³⁷ At 64.

¹³⁸ At 64.

¹³⁹ At 25.

¹⁴⁰ Ministry for the Environment "New Zealand's greenhouse gas inventory 1990-2017" (April 2019) ME 1411, at 148.

¹⁴¹ At 148.

emissions.¹⁴² Agriculture's reintroduction into the NZ ETS is now currently being negotiated.¹⁴³ However, anecdotal evidence of resistance is still visible, through mediums such as social media¹⁴⁴ and news media,¹⁴⁵ which exacerbate the ingroup/outgroup divide.

Parliament represent the 'overall' ingroup in NZ by virtue of their being elected by majority vote. Through Parliament's promulgation of the law, ingroup norms are sustained and group products are created. However, though being the overall societal ingroup, in the climate change context there are other powerful factions (such as agriculture and fossil fuel intensive industries) who do not support the Parliamentary ingroup norms. Despite this, Parliament is sovereign so can enforce ingroup norms upon the outgroup through the rule of law. Therefore, by enacting creeping regulation, Parliament can change the ingroup/ outgroup constituency by shifting outgroup individuals' norms to align with Parliament's ingroup norms in the context of climate change.

Creeping regulation operates via the SIT as group-level interactions are manipulated to shift individuals towards the ingroup's pro-climate norms. Those not undertaking the pro-climate norms become categorised as the outgroup and are given corresponding outgroup social identities. In the context of climate change, these outgroup social identities revolve around being environmentally negligent or not caring about the environment, being 'dirty' emitters and so forth. Outgroup members then undertake comparisons – comparing their norms against the ingroup norms. Because their norms are not positively evaluated against the ingroup norms, they experience a loss of self-esteem. For example, they may feel ashamed they are not undertaking the normative pro-climate behaviours of the ingroup that support their existing normative beliefs societal coordination as a social good. They may also feel that, contrary to their social identity, they *do* care about the environment. This cognitive dissonance¹⁴⁶ further invokes feelings of confusion and shame, degrading self-esteem. The need to maintain self-esteem results in individuals in the outgroup shifting their internalised norms to be congruent with the

¹⁴² Jamie Morton "Landmark climate change breakthrough: Farmers agree to emissions pricing" *The New Zealand Herald* (online ed, Auckland, 16 July 2019).

¹⁴³ Morton, above n 142.

¹⁴⁴ For example: NZ Farming "Untitled" (23 August 2019) Facebook <<https://www.facebook.com/NZFarming/photos/a.250749515104237/1213820012130511/?type=3&theater>>. This untitled public social media post is an example of farmers' resistance towards agricultural practice being changed to mitigate climate change stating, "[s]chool children are bringing home anti-farming propaganda, telling them that drinking milk destroys the environment," and alleging pro-climate groups' mandate is to "... tell lies to destroy farming." The post further states, "Climate change is caused by humans not by cows."

¹⁴⁵ For example: Jeremy Baker "Climate change: are farmers being asked to do the lion's share?" *The New Zealand Herald* (online ed, Auckland, 26 June 2019; Rowena Duncum "Time to stop shaming farmers" *The New Zealand Herald* (online ed, Auckland, 22 August 2019).

¹⁴⁶ See: Leon Festinger *A theory of cognitive dissonance* (Stanford University Press, Palo Alto CA, 1957) as cited in Dolores Albarracín and Patrick Vargas "Attitudes and Persuasion: From Biology to Social Responses to Persuasive Intent" in ST Fiske, DT Gilbert & G Lindzey (eds) *Handbook of Social Psychology: Volume I* (5th ed, John Wiley & Sons Inc, Hoboken NJ, 2010) 394 at 417. Festinger's theory of cognitive dissonance states that when there is inconsistency between an individual's attitudes/internal norms and behaviours, something must change to eliminate the dissonance. This is because individuals tend to seek consistency between their attitudes and behaviours.

ingroup, becoming ingroup members. As more people join the ingroup the outgroup diminishes, isolating those who remain in the outgroup and further diminishing their self-esteem. This isolating effect prompts people to join the pro-climate ingroup.

The use of the SIT in this way was seen recently around plastic bag use. Supermarkets – a powerful societal ingroup – instigated an anti-plastic bag norm. To prevent degradation of self-esteem and stigmatisation, individuals adopted this ingroup norm and began using reusable bags, with the number of those not using reusable bags steadily shrinking, thus feeling pressure from the growing ingroup to adopt the ingroup norm. Similarly, Parliament – as the overall societal ingroup with sovereign power – must use the SIT in this way. Creeping regulation must be promulgated in a way which manipulates the climate-ambivalent/climate-detrimental outgroup into adopting ingroup pro-climate norms to maintain self-esteem. The use of subliminal creeping regulation will prompt compliance with later climate change regulation which may be collectively framed, invoke social comparison or regret, or may simply be more 'hard core.' This is because creeping regulation incites individuals to make comparisons between themselves and others, assess their social identities, preserve self-esteem and avoid stigma. In this way, it effectively makes use of the social context in which climate change is occurring to push the embodiment of pro-climate goals and norms.

PART 5:

‘Creeping regulation’: learning from case studies

The previous parts have laid the jurisprudential foundations for creeping regulation and justified its use by reference to deficits in the current regulatory scheme and its grounding in social psychology. Now, how creeping regulation might look must be investigated. This type of regulation is not new. The utilisation of group-level psychology in regulation to meld societal norms through self-esteem and stigma has occurred before. Two case studies will be explored to illustrate this: NZ’s anti-tobacco campaign, and wartime control in Britain. In their unique and individual contexts, these cases both pass Brownsword’s regulatory thresholds. This is evident through their respective success and reception by the societies they were implemented in.

5.1 New Zealand’s anti-tobacco campaign

With the health detriments of tobacco having been known in NZ for over 50 years, NZ’s policy has been of denormalisation.¹⁴⁷ Regulatory measures have been implemented which support a change in social norms around smoking and tobacco use. There are three main ways denormalisation has occurred: through the Smoke-free Environments Act 1990 (SFEA), restricting tobacco company advertising, and compulsory packaging for cigarette packets.

The Smoke-free Environments Act is the key policy tool for denormalising smoking.¹⁴⁸ Enacted in 1990, it banned nearly all tobacco advertising of NZ origin, tobacco promotion and workplace smoking.¹⁴⁹ It also authorised the creation of the Health Sponsorship Council to promote smoke-free lifestyles,¹⁵⁰ however the Council and its functions have since been repealed and taken over by the Health Promotion Agency who presently administer the SmokeFree NZ campaign.¹⁵¹ As of 2019, the SFEA applies to the buildings and grounds of schools and early childhood centres, indoor areas of licensed premises and workplaces where ‘licensed premises’ includes bars, restaurants, cafés, sports clubs and casinos, and ‘workplaces’ includes offices, factories, warehouses, work canteens and ‘smoko’ rooms.¹⁵²

¹⁴⁷ SHORE & Whariki Research Centre *Review of Tobacco Control Services* (Massey University, July 2014), at 11.

¹⁴⁸ At 11.

¹⁴⁹ Smoke-free Environments Act 1990 [Smoke-free Environments Act], sections 5-13B; sections 22-29; George Thomson and Nicholas Wilson *Resource Document: A Brief History of Tobacco Control in New Zealand* (Australasian Faculty of Public Health Medicine, January 1997), at 44.

¹⁵⁰ Smoke-free Environments Act, Part 3 (repealed).

¹⁵¹ See generally: Health Promotion Agency “Home” SmokeFree < <https://www.smokefree.org.nz/> >

¹⁵² Smoke-free Environments Act, sections 5-13B.

The SFEA's restrictions on the environments in which smoking can take place clearly enforces one of the main purposes of the legislation - to protect the non-smoking public from the harms of second-hand smoke.¹⁵³ The ability to make smoke-free complaints if there is an infringement to a dedicated smoke-free area further reinforces this.¹⁵⁴ This aim of protecting non-smokers is congruent with history of anti-tobacco developments in NZ. Following the release of information on the dangers of passive smoking, the smoke-free movement accelerated considerably.¹⁵⁵ The science provided a much stronger basis for non-smokers' rights. It shifted the rationale for regulation away from controlling and intruding on smokers' rights, to the protection of non-smokers' – particularly children's – rights.¹⁵⁶ It therefore provided a new moral and political basis for tobacco control, giving 'regulatory legitimacy' to subsequent legislation. Moreover, this information provided 'regulatory connect.' Although there was still considerable political and industry opposition to the SFEA when it was passed,¹⁵⁷ the science on passive smoking provided a sufficient nexus between the problem and the need for regulation.

Importantly, the SFEA is an effective regulatory anchor for the anti-tobacco campaign. It provides legislative tools to support the societal denormalisation of tobacco. It does this through comprehensively controlling the marketing, advertising and promotion of tobacco products.¹⁵⁸ This reduces the social approval, appeal and cultural acceptance of smoking and tobacco-use amongst young people.¹⁵⁹ It also ring-fences the influence of tobacco companies, with the objective of reducing the approval, appeal and acceptance of smoking in this way. The Smoke-free Environments Regulations 2017 promulgated under the SFEA are a prime example of this. The Regulations require the standardised packaging of cigarettes and tobacco – with graphic images and numerous health warnings in English and te reo Māori.¹⁶⁰ Social media has also recently been used to spread the message of denormalisation, with campaigns making smokers or potential smokers aware of the tobacco industry's strategies and thereby better able to resist its messages.¹⁶¹

The same psychological mechanisms functioning in the theoretical use of creeping regulation for climate change can be seen in the denormalisation of tobacco. Smoking has gone from being a normal activity, to an activity stigmatised as irresponsible, irrational, immoral and wrong.¹⁶² When behaviour is denormalised, stigmatisation often arises as an adjunct. Stigma is associated with the SIT. Categorisation, as the first step of the SIT, can sometimes result in negative discrimination between

¹⁵³ Smoke-free Environments Act, section 4.

¹⁵⁴ Sections 15-16.

¹⁵⁵ George Thomson and Nicholas Wilson *Resource Document: A Brief History of Tobacco Control in New Zealand* (Australasian Faculty of Public Health Medicine, January 1997) at 22.

¹⁵⁶ At 25.

¹⁵⁷ At 43.

¹⁵⁸ Smoke-free Environments Act, section 3A.

¹⁵⁹ Section 21.

¹⁶⁰ Smoke-free Environments Regulations 2017 [Smoke-free Environments Regulations], sections 8-28.

¹⁶¹ SHORE & Whariki Research Centre, above n 147, at 12.

¹⁶² Lee Thompson, Jamie Pearce and J Ross Barnett "Moralising geographies: stigma, smoking islands and responsible subjects" (2007) 39(4) *Area* 508, at 513.

groups.¹⁶³ This discrimination can result in stigma attaching to the outgroup who are not performing societal norms.¹⁶⁴ Stigma can be damaging to the self-esteem of the individuals who are in the outgroup. In certain contexts this damaging stigma is held unacceptable, for example, stigma around mental health, particularly as mental health is not perceived to be something that is ‘chosen’ or ‘controllable.’¹⁶⁵ However, when stigma arises against behaviour that is perceived as chosen or controllable, NZ’s legislature have indicated stigma is acceptable and legitimate in these contexts. The anti-tobacco campaign uses stigma to encourage its anti-smoking norm: those who smoke are placed in the stigmatised outgroup and face decreased self-esteem. The legislature have also indicated the use of stigma is acceptable and legitimate in contexts where harm is done not only to those performing the behaviour but those who are passive. The rights of non-smokers therefore provide justification for legislation which subordinates smokers’ rights. More generally, in liberal societies, it has long been argued that it is sometimes appropriate and obligatory for the government to use its coercive powers to affect behaviours of individuals that are injurious to the health and wellbeing of others.¹⁶⁶

Despite the legitimacy of the regulation and the anti-tobacco campaign, the tobacco industry, as a member of the stigmatised outgroup, continue to resist tobacco control measures in NZ, particularly those that constrain their marketing.¹⁶⁷ Prior to the Smoke-free Environments Regulations 2017, the industry launched a vicious attack against the anti-tobacco campaign, attempting to sway majority public opinion against the regulators and shift group composition.¹⁶⁸ If the majority of public opinion is against regulators, the regulators no longer represent ingroup with regards to tobacco regulation. Therefore, to maintain status as the ingroup authority in this context, the regulators are pressured to adopt the perceived ingroup norms. Regulators feeling pressure to adopt perceived ingroup norms is usually seen via legislative vacillation – a familiar notion in the context of climate change. When the tobacco industry was resisting the marketing legislation, many of their messages targeted NZ’s economy, alleging the control measures would constitute a breach of international trade agreements, lead to an increase in illicit trade, harm NZ’s trade reputation, and so on.¹⁶⁹ The tobacco industry therefore attempted to sway ingroup members based on their potential stronger identification with other norms – such as economic – over public health norms. Through this they hoped to build constituencies of public support to influence regulator and politician decisions around new tobacco marketing

¹⁶³ Rupert Brown *Prejudice, It’s Social Psychology* (2nd ed, Wiley-Blackwell, West Sussex, 2010) at 10.

¹⁶⁴ At 216 and 226.

¹⁶⁵ At 226.

¹⁶⁶ Ronald Bayer “Stigma and the ethics of public health: Not can we but should we” (2008) 67 *Soc Sci Med* 463 at 468; see also Stephen Todd (ed) *The Law of Torts in New Zealand* (online looseleaf ed, Thomson Reuters, at [59.10.1.02]). The tort of nuisance prevents people from undertaking actions that are injurious to others use and enjoyment of their land.

¹⁶⁷ Janet Hoek and Phillip Gendall “Tobacco product innovation in a smokefree world. Oxymoron or commercial cynicism?” (23 October 2018) Public Health Expert <<https://blogs.otago.ac.nz/pubhealthexpert/2018/10/23/tobacco-product-innovation-in-a-smokefree-world-oxymoron-or-commercial-cynicism/>>.

¹⁶⁸ Andrew Waa and others “Analysis of the logic and framing of a tobacco industry campaign opposing standardised packaging legislation in New Zealand.” (2017) 26 *BMJ* 629, at 629.

¹⁶⁹ At 629.

regulation.¹⁷⁰ The resistance of the tobacco industry illustrates in another light how group level norms can be manipulated.

Importantly, the failure of the tobacco industry's resistance against the 2017 Regulations illustrates how powerful Parliamentary held ingroup norms are. Parliament's strong history of promulgating the anti-tobacco norm, meant by the time the 2017 Regulations came about this norm had been adopted by the majority of society – a true ingroup norm. This illustrates that more 'hard core' law can be used to strengthen and perpetuate norms regulators see as desirable and justifiable in society once the majority of the public understand and are connected to the nexus between the problem and the need for regulation ('regulatory connect'). Correspondingly the means used are more readily accepted as ethically defensible and legitimate ('regulatory legitimacy') in light of the problem.

5.2 World War 2 rationing in Britain

Rationing was authorised by the British government for the duration of World War 2.¹⁷¹ Rationing is the allocation of scarce resources amongst society. It has been described as a contract, where freedom of consumer choice is exchanged for secure and equitable deliveries of specified resources controlled by the government.¹⁷² Generally, rationing was accepted by the British public as a wartime measure, with little resistance. Specific circumstances instrumental to this acceptance were: rationing being a temporary albeit necessary measure, persuasive economic arguments, underlying trust in central government and the scheme itself being impartial, administered fairly, and implemented for a correct cause.¹⁷³ Broader circumstances such as patriotism and popular respect for the law also contributed.¹⁷⁴ Together, these broad and specific circumstances created majority group level support for rationing, and rationing became an ingroup norm.

Importantly, rationing was not a norm before the government implemented the scheme, just as pro-climate norms are not the dominant norm currently held in NZ society. Other already internalised norms present in the majority groups' internal points of view were appealed to – such as patriotism, fairness and respect for the law when enacted in response to a correct cause. By appealing to the norms already entrenched in individuals' internal points of view, rationing itself became accepted as a norm. Political discourse was the way by which this occurred. Lord Woolton (Minister for Food) and other Ministers took great pains to convince the public that rationing was necessary and temporary, explaining the economic case and invoking popular memory of the success of rationing during WWI.¹⁷⁵ For those who

¹⁷⁰ Waa and others, above n 168, at 629.

¹⁷¹ Iselin Thein "Food rationing during World World two: a special case of sustainable consumption?" (September 2009) Anthropology of food <<https://journals.openedition.org/aof/6383>> at [1].

¹⁷² At [4].

¹⁷³ Mark Roodhouse "Rationing returns: a solution to global warming?" (1 March 2007) History and Policy <<http://www.historyandpolicy.org/policy-papers/papers/rationing-returns-a-solution-to-global-warming>>.

¹⁷⁴ Roodhouse, above n 173.

¹⁷⁵ Roodhouse, above n 173.

did not understand the economic arguments, the principle of fair shares for all – a key pillar of the rationing scheme – motivated acceptance of rationing as the norm.¹⁷⁶

The political discourse used to present rationing to the British public to enforce it as a norm and ensure its compliance has strong social psychology elements, tapping into the concept of self-esteem crucial to SIT. Not only did continual reinforcement of the necessity of rationing for the collective good mean rationing appealed to the already internalised norm of societal coordination, but it also appealed to the desirable internalised norms of being fair and doing the 'right thing'. These concepts further import connotations of utilitarianism, acting for the greater good, and recognising one's own desires might be sacrificed to better serve the collective. Accordingly, those who complied with rationing might increase positive self-esteem by embodying these concepts of being fair and doing the right thing. On the other hand, non-complying individuals might feel guilty as they were being selfish and placing their own needs above others during wartime – a collective social problem. This would lead to an erosion of non-complying individual's self-esteem. Therefore, to maintain positive self-esteem, individuals would act fairly, do the right thing, and conform with the norm of rationing.

5.3 Analysis

The anti-tobacco campaign and WW2 rationing controls both tap into the SIT to promulgate the new political and legal aims as normal in society and ensure compliance. Both utilise the importance of self-esteem in SIT, but in different ways.

Denormalisation of smoking via the anti-tobacco campaign has resulted in the corresponding outgroup categorisation and stigmatisation of those who smoke. To avoid the degradation of self-esteem which comes with outgroup stigma, and to maintain positive self-esteem, individuals therefore either avoid joining the outgroup, or they change their norms and accordingly attempt to change their behaviour. On the other hand, WW2 rationing appealed to boosting individuals' pre-existing self-esteem. Politicians portrayed rationing as necessary to support an existing ingroup norm – societal coordination – and as supporting the desirable norms of fairness and doing the right thing. The majority of individuals who already viewed themselves as embodying these norms willingly adopted rationing to maintain existing positive self-esteem and those who sought to be portrayed in this way accordingly adopted the behaviour.

The NZ legislature have indicated through the anti-tobacco campaign that the manipulation of self-esteem is not only acceptable and legitimate, but effective. World War 2 rationing shows that using political discourse to appeal to self-esteem boosting desirable social norms when framing new,

¹⁷⁶ Roodhouse, above n 173.

potentially unpopular, measures is also successful. Because of the success of these two cases in changing norms and behaviours of entire nations, their lessons should be applied to climate change.

PART 6:

Application of case studies to climate change

In this Part, I take the regulatory lessons from the case studies explored in Part 5. Whether and how they could be applied to climate change will be examined, and whether they would pass Brownsword's regulatory thresholds identified in Part 3 will be considered.

Climate change must be compared and contrasted to both smoking and war. If it transpires climate change is too unique and wicked a problem, lessons from the anti-tobacco campaign and WW2 rationing may be redundant. However, as the following analysis will show, climate change bears strong enough similarities to both those past issues for their regulatory lessons to be transferrable.

6.1 Smoking and climate change

The measures prohibiting smoking in certain settings seen in the anti-tobacco campaign are not necessarily transferrable to the context of climate change. Smoking is a localisable activity; therefore the harms are localisable. The obvious act of an individual smoking a cigarette produces harm to surrounding individuals that can be causatively linked. However, emissions are not localisable – it is almost impossible to trace the harms of emissions to one particular person, industry, or area.

Despite this difference, an analogy can be made between emissions and passive smoke. Just as second-hand smoke harms non-smokers, high emissions activities harm even those who do not partake in them. Whether smoking or emitting GHGs, the consequences of these harmful activities are borne by other individuals. Moreover, those who emit or smoke have often fallen prey to cognitive myopia. Because they cannot foresee the impact of their harm on other individuals, they do not take into account the full cost/benefit spectrum when carrying out their behaviour. Particularly, they do not take into account the long-term collective cost of their short-term individual benefit. This harm was tapped into in the anti-tobacco denormalisation campaign – messages of disapproval coming from the government that harm to others is unacceptable and not normal. This has led to smoking becoming a socially unappealing behaviour. Denormalisation in this sense – reducing the appeal, approval, acceptance and subsequent normativity of the behaviour – has mainly been achieved through the standardised packaging regulations,¹⁷⁷ and through public health campaigns.¹⁷⁸ This same campaigning could be carried out with climate change to instil pro-climate norms and express governmental disapproval toward climate-ambivalent/climate-detrimental behaviour.

¹⁷⁷ Smoke-free Environments Regulations, above n 160.

¹⁷⁸ For example see NZ Farming, above n 144.

Creeping regulation is the best way to go about doing this, so the resistance historically seen with traditional environmental or climate legislation does not arise. For example, the government could fund educational adverts to be shown on television which show the harms of climate-ambivalent/climate-detrimental behaviour (similar to those for smoking), billboards encouraging pro-climate behaviour could be installed (as exposure to the behaviour can import the norm),¹⁷⁹ social media campaigns around denormalisation of high emitting industries could be launched, and amendments to the Education Act 1989 could be made so the science behind the causes and consequences of climate change is explicitly taught in schools. Green-labelling emissions heavy products such as meat and dairy (i.e. how methane was emitted by their ruminant predecessors) could be made mandatory. Lastly, legislation to ban advertising by fossil fuel companies such as BP or Z petrol stations,¹⁸⁰ agricultural companies, such as Fonterra,¹⁸¹ and airlines – who constantly tempt consumers with inexpensive yet emissions heavy flights when there is no other low-cost efficient way of travelling in NZ¹⁸² – could be implemented.

6.2 Climate change as war

Regarding the war, similarities can be drawn between the scale of the disaster, its indeterminate nature and the desire for a common goal. The harms of emissions are a global risk. This is similar to war, where the risk was global, prompting rationing schemes across the world. Climate change is also similar to war in that it is indeterminate. No one knows when we will reach a stage where we feel 'safe' from the consequences of climate change. In this sense, climate change and war are similar in the emotions they invoke. Lastly, in war there is a common goal – to end the war. Likewise, it is accepted that GHG emissions must be reduced to mitigate the disastrous global consequences of climate

¹⁷⁹ Exposure to the behaviour can import the norm via the mere exposure effect, also known as the familiarity principle. This phenomenon is whereby people tend to develop a preference for things merely because they are familiar with them. For more, see Matthew Montoya, Robert Horton, Jack Vevea, Martyn Citkowitz and Elissa Lauber “A Re-examination of the Mere Exposure Effect: The Influence of Repeated Exposure on Recognition, Familiarity and Liking” (2017) 143(5) *Psychol* 459.

¹⁸⁰ For example: Ben Goodale “Thumbs up for BP. It’s great at marketing and, greenwashing” *The New Zealand Herald* (online ed, Auckland, 4 July 2019); StopPress Team “Z Energy solves the world’s problems to win March Ad Impact Award” (21 April 2017) StopPress <<https://stoppress.co.nz/news/z-energy-solves-worlds-problems-win-march-ad-impact-award>>. These advertising campaigns attempt to greenwash fossil fuels.

¹⁸¹ For example: Duncan Bridgeman “Fonterra Farmers speak out in new ad campaign” (13 May 2016) *National Business Review* <<https://www.nbr.co.nz/article/fonterra-farmers-speak-out-new-ad-campaign-db-188931>>; Stuff “New Fonterra ads draw scathing criticism” (7 January 2017) Stuff <<https://www.stuff.co.nz/business/industries/88203995/new-fonterra-ads-draw-scathing-criticism>>. Fonterra’s ‘Fresh Start to Dairy’ campaign aimed to send positive messages about the dairy industry despite its environmental impacts. This included video advertisements of dairy farmers talking to former All Blacks captain Richie McCaw and a series retro-inspired posters that encouraged the renewed consumption of dairy in NZ and discourage “dietary fads and special interest groups.”

¹⁸² For example: Lorna Thornber “Why New Zealand will never fully embrace the flight-shaming movement” (27 September 2019) Stuff <<https://www.stuff.co.nz/travel/kiwi-traveller/116153026/why-new-zealand-will-never-fully-embrace-the-flightshaming-movement>>; Charlie Mitchell “‘The world’s least sustainable airline’: Air New Zealand’s climate dilemma” (6 April 2019) Stuff <<https://www.stuff.co.nz/business/107455477/the-worlds-least-unsustainable-airline-air-new-zealands-climate-dilemma>>.

change. Negotiations as to how to achieve this collective objective are ensuing – not only between countries, but within single countries. Even in NZ, as this dissertation has illustrated, there are differing opinions on whether and how GHG emissions should be mitigated by different industries, and negotiations between regulatees and government continue. However, unlike war, where no one country can implement a settlement without others agreeing, Parliament in NZ is supreme. Therefore, it can theoretically enact regulation, as sovereign, that must be complied with. Similar justifications may be given for this regulation as were given for rationing – the measure is necessary but temporary for the nation’s current and future environmental wellbeing, while appealing to desirable pre-existing norms most individuals wish to hold or already do hold, such as: societal coordination as a social good, fairness and doing the right thing.

However, justifying harsh or radical regulation by appeals to desirable norms may not work for climate change. As per Part 2, societal coordination has not been enough on its own to engender compliance with environmental regulation in the past. For most participants of the NZ ETS, the justification for the scheme as necessary for the nation’s current and future environmental wellbeing was known, but it was not enough for compliance. However, this may have been because despite implementing the NZ ETS, the political discourse remained distinctly economically centred. Accordingly, the political discourse became flavoured with “climate hypocrisy,”¹⁸³ stating that pro-climate norms needed to be supported yet still endorsing some high emissions lifestyle-norms for the sake of economic wellbeing.¹⁸⁴ If regulators truly wish to justify any climate change regulatory scheme, they must use the power of their political discourse – as was done in WW2 – to wholeheartedly encourage the pro-climate norms embodied in the creeping regulation, as well as illustrating how the pro-climate norms support existing and desirable norms.

Because of the complex, multifaceted nature of climate change it is argued creeping regulation that incorporates the denormalisation methods used in the anti-tobacco campaign, but uses the power of political discourse like war, is required. And, because of the entrenched status quo that supports high emissions norms, creeping regulation is necessary to subliminally change perceptions of what is normal without regulatees noticing. If the legislature denormalise and stigmatise high emissions behaviour through creeping regulations *and* show their support for the pro-climate norms creeping regulations embody through political discourse, eventual more radical measures such as personal carbon rationing

¹⁸³ Sonia Sodha “Sin taxes on meat won’t change a climate hypocrite like me. Rationing might.” (1 June 2019) *The Guardian* <<https://www.theguardian.com/commentisfree/2019/jun/01/sin-taxes-on-meat-or-flying-wont-change-a-climate-hypocrite-like-me-rationing-might>>. Climate hypocrisy arises due to individuals who appear pro-climate/pro-environmental stating they want to mitigate the climate crisis yet still partake in emissions intensive activities such as using fossil fuels, or support of the agriculture industry.

¹⁸⁴ For example: Jason Walls and Luke Kirkness “Petrol price taxes: Prime Minister Jacinda Ardern takes on oil firms – BP, Z respond” *The New Zealand Herald* (online ed, Auckland, 9 October 2018). Despite the Prime Minister and her government purportedly having climate change response priorities, her concern with the high price of petrol last year reflected a different set of interests.

can be implemented. Accordingly, creeping regulations and radical measures will ultimately support each other. An example of how this could theoretically work in detail follows.

6.3 An example of creeping regulation working to enforce pro-climate norms using cognitive and social psychology

Creeping regulation works to enforce pro-climate norms as an ingroup trait, using the SIT to manipulate peoples' self-esteem to incentivise ingroup membership. Creeping regulations also make use of the notion that people behave less selfishly when a social dilemma is introduced as a non-economic activity, as opposed to an economic one.¹⁸⁵ The activation of ethical considerations is therefore important in creeping regulations' substance. Accordingly, creeping regulations aim to make use of the social aspect of climate change by framing pro-climate normative messages in terms of the ethical impacts of climate change (its human, social and environmental cost) as opposed to its economic or market cost.

Creeping regulation is an appropriate medium for these pro-climate ethical and social considerations to be activated and widely disseminated due to the fact creeping regulation aims to subliminally blend into society. Creeping regulation aims to do this by making use of the right to freedom of expression in two ways. One way is by Parliament using their freedom of expression to mandate advertisements, billboards, social media campaigns, political discourse and Education Act reforms to instil pro-climate norms. The other way is by Parliament limiting others' freedom of expression by requiring mandatory green-labelling of emissions heavy products such as meat and dairy, and prohibiting agricultural, fossil fuel and airline company advertisements to denormalise climate-ambivalent/climate-detrimental norms and behaviour. That creeping regulation makes use of the freedom of expression in its subliminal operation is important. People are constantly exposed to various others' expressive freedom, regardless of their demography. Almost all of society have direct or indirect access to social media platforms, TV or radio. And, almost all of society are exposed to meat and dairy products. By operating through mediums and products almost all of society are exposed to, creeping regulation can affect almost everyone. This means that the burden of the creeping regulation is borne more or less equally by all, as opposed to being felt by only some, which is the outcome of measures like the carbon tax.¹⁸⁶

Some ethical considerations that creeping regulation may embody to frame its pro-climate norms may be the impact of current generations' actions on future generations' wellbeing, the impact of human activities on non-human animals and the rest of nature, and the impact of individualism on the collective. The promulgation of these ethical considerations using freedom of expression may take the form of

¹⁸⁵ Madan Pillutla and Xiao-Ping Chen "Social Norms and Cooperation in Social Dilemmas: The Effects of Context and Feedback" (1999) 78 OBHDP 81 as cited in Rachel New, Julian Savulescu and Nadira Faber "Cooperation in social dilemmas: How can psychology help to meet climate change goals?" (3 January 2018) The Inquisitive Mind <<https://www.in-mind.org/article/cooperation-in-social-dilemmas-how-can-psychology-help-to-meet-climate-change-goals>>.

¹⁸⁶ Roodhouse, above n 173.

mandatory advertisements being shown during prime-time television which depict the world we live in now versus the world we (and our children) may inherit in 20 years' time if we continue emitting the way we are now. The mandatory advertisements may also show the melting of glaciers and subsequent destruction of the Arctic habitats of polar bears causing their death, or the impacts of the heavy urban emissions on third world countries. The effect of these advertisements is to combat the cognitive myopia inherent in climate change due to emissions not being immediately seen or felt by those who emit. The advertisements provide visual and auditory stimuli, so also better enable the consequences of climate change to be sufficiently viscerally felt. The promulgation of these ethical considerations to promote pro-climate norms by reducing cognitive myopia and increasing visceral reactions to climate change may also take the form of billboards, bus stop advertisements or social media campaigns. These mediums could show screengrabs from the mandatory advertisements or build on the ethical narratives of the advertisements shown on television. Because creeping regulation makes use of mediums almost all of society are constantly exposed to, creeping regulation from different mediums can reinforce and support each other to further drive pro-climate norms and denormalise high emissions behaviour.

Corresponding to the creeping regulation which mandates pro-climate freedom of expression, creeping regulation that limits freedom of expression should also be put in place. The prohibition of major emitters' advertisements on television, radio, social media and billboards should occur. The prohibition of sponsorships from these same emitters should also occur to support the pro-climate norms creeping regulation hopes to instil. Moreover, the prohibition of scientifically incorrect discourse on all media platforms¹⁸⁷ should occur to prevent the outgroup trying to manipulate group constituencies.

Another denormalisation strategy which makes use of freedom of expression is to promote desirable behaviour.¹⁸⁸ In addition to visual and auditory campaigns making use of ethical considerations to decrease cognitive myopia and increase visceral reactions, education is an important tool for denormalisation. The provision of alternative behaviour marketed as a desirable norm indicates to people what they can be doing instead of their status quo behaviour and bolster the denormalisation of this behaviour. For example, a mandatory advertisement showing our earth now versus our earth in 20 years if we do not change could be followed up in the next advertisement break by an advertisement that promotes cycling to work or cutting down on meat and dairy products. Billboards which increase visceral reactions to climate change could be complemented by billboards which suggest ways to stymy this gut feeling of fear or horror such as switching to an electronic vehicle or cutting down on air travel. The Education Act could also be amended so that at primary and high school level children are taught about the causes and consequences of climate change, and how it can be mitigated. A 'Climate Change Education Committee' could be authorised by this amendment to create and implement inventive

¹⁸⁷ For an example of scientifically incorrect discourse, see NZ Farming, above n 144.

¹⁸⁸ Rachel New, Julian Savulescu and Nadira Faber "Cooperation in social dilemmas: How can psychology help to meet climate change goals?" (3 January 2018) The Inquisitive Mind <<https://www.in-mind.org/article/cooperation-in-social-dilemmas-how-can-psychology-help-to-meet-climate-change-goals>>.

methods to teach children and the general public about the causes, consequences and ways to mitigate climate change. For example, a scheme for pro-climate and environmental behaviour in schools similar to the Life Education Trust's initiative with Harold the Giraffe could be implemented.¹⁸⁹

Other types of creeping regulation could be the mandatory green-labelling of meat and other foods with high emissions profiles (such as highly processed imported foods) and green-labelling at petrol stations. Compulsory stickers on meat could indicate the tonnes of emissions caused by the ruminant from who the product came or could indicate the volume of water needed to get to the final product. In this way, pro-climate norms are persistently communicated directly to the individuals who engage in climate-ambivalent/climate-detrimental norms, as opposed to the advertising and education strategies which are communicated to society at large. Again, green-labelling works in concert with the other creeping regulatory measures by reinforcing the messages in the advertisements and education campaigns. Together, all the measures used in creeping regulation work to reinforce each other, which negates any possibility of the SAB. They create a strong web of regulatory tools which burden almost all due to their widespread in society, and act to disseminate a clear message of government endorsed pro-climate norms and emissions-denormalisation. Moreover, by making salient ethical rather than economic considerations many of the cognitive biases faced in the climate change problem are overcome.

In addition to overcoming cognitive biases through the way creeping regulation interacts with regulatees, for creeping regulation to truly be effective, it must be supported by the ingroup. In other words, Parliament as the ingroup must actively adopt and support the pro-climate norms promulgated by the creeping regulation. Parliamentary support of the pro-climate norms promulgated through the creeping regulation could take place through discursive entrepreneurship.¹⁹⁰ Discursive entrepreneurship takes advantage of the capacity of publicly influential individuals to use rhetorical means to legitimise certain normative claims and connect these commitments to the larger political order.¹⁹¹ Parliament, and other recruited publicly influential individuals, could create a discourse around climate change, supporting the pro-climate norms embodied in creeping regulation to encourage their acceptance and adoption. This discourse could even analogise climate change to war.

Internationally, the analogy of climate change as war has existed since the 1990s.¹⁹² However, it has only recently been adopted in NZ following Associate Minister for Transport Julie Anne Genter's

¹⁸⁹ See: Life Education Trust "Our Goals" Life Education: learning with Harold <<https://www.lifeeducation.org.nz/who-we-are/ourgoals>>; Life Education Trust "Our Programme" Life Education: learning with Harold <<https://www.lifeeducation.org.nz/in-schools/ourprogramme>>; more generally, Life Education Trust "Welcome!" Life Education: learning with Harold <<https://www.lifeeducation.org.nz/>>

¹⁹⁰ Maurie Cohen "Is the UK preparing for "war"? Military metaphors, personal carbon allowances, and consumption rationing in historical perspective" (2011) 104 *Clim Change* 199 at 199.

¹⁹¹ At 200.

¹⁹² At 204.

declaration that climate change is “our generation’s WWII.”¹⁹³ Likening climate change to war enables similar ingroup ideals that were appealed to in the British political argument justifying rationing to be used in the climate change context. The aspiration of the majority of people to personify desirable ingroup norms such as fairness and ‘doing the right thing’ to increase positive self-esteem can be used to support the pro-climate norms embodied in creeping regulation. Parliament could create a ‘Climate Change Discourse Committee’ in charge of the campaign promulgating this discursive entrepreneurship to support the creeping regulation through group-level psychology. The Committee could call for publicly influential New Zealanders (such as NZ politicians, sports people, actors/actresses, musicians) who are pro-climate and educate them on how to spread the discourse of climate change as war. Particularly, discursive entrepreneurs should be educated as to how to appeal to desirable ingroup norms to encourage subsequent adoption pro-climate norms and behaviour. By viewing discursive entrepreneurs endorse pro-climate norms as necessary to not only retain the existing norm of societal coordination but to embody desirable norms such as fairness, ‘doing the right thing’ and associated other utilitarian concepts, individuals will be more likely to adopt pro-climate norms. And, by using a broad range of discursive entrepreneurs, who individuals may identify with by virtue of their membership to other groups, many individuals will change their norms and subsequent behaviour. After changing their behaviour to reflect the perceived ingroup norm, individuals can favourably compare between themselves and the ingroup, increase their positive self-esteem and decrease the risk of low self-esteem through outgroup membership.

Notwithstanding discursive entrepreneurship accelerating ingroup membership, group-level psychology continues to operate via creeping regulation to push ingroup membership by virtue of its own function. As pro-climate norms are absorbed into more individuals’ internal points of view and become reflected in subsequent behaviour, ingroup numbers swell and outgroup numbers decrease. Those who are part of the outgroup will face increased stigma from the larger ingroup. To avoid decreases in self-esteem and outgroup stigma, those in the outgroup will make changes in their own norms to join the pro-climate ingroup.

Accordingly, pro-climate norms become part of individuals’ internal point of view and inform why subsequent environmental or climate law should be followed. These norms create a better foundation for compliance with subsequent ‘hard core’ regulatory measures which may come from an economic paradigm. Such regulatory measures could include personal carbon rationing¹⁹⁴ – not yet explored by the NZ government, though debated abroad – or an entirely new ETS.

¹⁹³ Zane Small “Julie Anne Genter declares climate change ‘our generation’s WW2’” (11 July 2019) NewsHub <<https://www.newshub.co.nz/home/politics/2019/07/julie-anne-genter-declares-climate-change-our-generation-s-wwii.html>>.

¹⁹⁴ See Roodhouse, above n 173; Tina Fawcett “Carbon Rationing and Personal Energy Use” (2004) 15(6) E&E 1067; Tina Fawcett “Personal carbon trading in different national contexts” (2010) 10(4) Clim Policy 339; Patrick Wintour “Miliband plans carbon trading ‘credit cards’ for everyone” (11 December 2006) The Guardian <<https://www.theguardian.com/politics/2006/dec/11/uk.greenpolitics>>.

6.4 Regulatory legitimacy

Whether the form of creeping regulation described above meets Brownsword's regulatory thresholds must be addressed. Creeping regulation embodies 'regulatory connect.' By instilling pro-climate norms, creeping regulation aims to provide a bridge between policy objectives and the public's norms with regard to climate change, so that any regulation in response to the problem is seen as reasonable and legitimate. 'Regulatory effectiveness' will only be established should the creeping regulation prove successful. However, based on the case studies and the sound psychological bases behind its mechanism, it seems likely creeping regulation would be successful, thus effective.

The threshold that presents a hurdle is therefore the 'regulatory legitimacy' of creeping regulation. Some may argue it is an 'underhand' way of regulating. There are also objections to creeping regulation in terms of its impingement on the freedom of expression contained in the NZ Bill of Rights Act 1990 (NZBORA).¹⁹⁵ Creeping regulation appears to encroach upon freedom of expression by forcing the green-labelling of meat and dairy products, prohibiting scientifically incorrect discourse on all media platforms and prohibiting the visual and/or verbal advertisements, billboards and sponsorships of major emitters such as agricultural, fossil fuel or transport companies. However, this issue of rights encroachment can be addressed swiftly. Sections 4-6 of the NZBORA permit limitations on rights that are reasonable and capable of being justified in a free and democratic society in NZ.¹⁹⁶ Read together, these sections indicate that rights are not absolute, and limits can be placed on them where the public interest supports that.¹⁹⁷ Limiting freedom of expression in order to denormalise climate-ambivalent/climate-detrimental behaviour and encourage pro-climate norms is reasonable and justifiable. Public interest supports limiting the freedom of expression of major emitters because climate change is an existential disaster with irreversible consequences that threaten mankind. In light of this, suitable regulation must be implemented, and if that means placing limits on freedoms, then that must be done.

¹⁹⁵ New Zealand Bill of Rights Act 1990 [NZBORA], section 14.

¹⁹⁶ NZBORA, sections 4-6.

¹⁹⁷ Geoffrey Palmer and Andrew Butler *A Constitution for Aotearoa New Zealand* (Victoria University Press, Wellington, 2016) at 172.

CONCLUSION

In the context of climate change we must think beyond the traditional economic and market-based tools we have used to regulate in NZ. So far, these have not operated in their intended manner, and compliance with them has been low. In this dissertation, I have used jurisprudential theory and psychological theory to explain why the current climate change regulatory scheme, the NZ ETS, has been unsuccessful. Each theory has revealed unique insights and I have used the downfalls as highlighted by each theory to inform and construct creeping regulation. Brownsword's regulatory thresholds have been used as an assessment tool throughout.

Creeping regulation acts as a creative, pluralistic and multifaceted regulatory scheme to combat climate change. It does so by essentially proposing to mandatorily immerse all of society in the pro-climate norms that desperately need to be adopted. The social psychology to inform the mechanism behind creeping regulation has been explained, as has the cognitive psychology that might be useful in framing creeping regulation. These psychological insights have been identified as being similar to jurisprudential theories which explain compliance with the law. Moreover, case studies have been undertaken to show the success of what I have identified as creeping regulation in other contexts, and I have taken lessons from these case studies to provide a detailed example of how creeping regulation could be used in the NZ climate change context.

Notwithstanding what has been explained in this dissertation, more work is needed to further explore the legitimacy of creeping regulation, statutory mechanisms as to how it might be implemented and political reaction to it. Accordingly, the door is left open as to where to next.

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