1. Introduction

1.1 EMERGENCE OF FOSSIL FUEL SUBSIDIES AS A MATTER OF INTERNATIONAL INTEREST

Various forms of fiscal and regulatory support for the exploration, extraction, processing of and consumer access to coal, oil, gas and other fossil fuels have been provided by governments to energy producers and consumers for hundreds of years, in all parts of the developed and developing world. But recently, calls for the elimination of fossil fuel subsidies have been issued by international figureheads such as the Secretary-General of the United Nations,¹ world leaders,² heads of the International Energy Agency (IEA)³ and Organisation for Economic Cooperation and Development (OECD),⁴ United Nations Environment Programme (UNEP),⁵ World Bank,⁶ and the International Monetary Fund (IMF).⁷ Fossil fuel subsidies have been described

¹ For example, Ban ki-Moon, Remarks To The High-Level Segment Of The 22nd Conference Of The Parties To The United Nations Framework Convention On Climate Change, Marrakech, 15 November 2016.

² A selection of statements has been compiled at 'World Leaders, Ministers and Experts All Agree on Phasing out Fossil Fuel Subsidies' (*Oil Change International*, 2012) <http://priceofoil.org/fossil-fuel-subsidies/international/key-quotes/> accessed 1 September 2015.

³ Damian Carrington, 'UK becomes only G7 country to increase fossil fuel subsidies', *The Guardian*, 12 November 2015, quoting Executive Director of the IEA Fatih Birol as saying 'Fossil fuel subsidies are public enemy number one for the growth of renewable energy.'

⁴ Alister Doyle, 'Progress on cutting fossil fuel subsidies 'alarmingly slow': OECD', *Reuters*, 21 September 2005 (quoting OECD Secretary-General Angel Gurría: 'We are totally schizophrenic. We are trying to reduce emissions and we subsidize the consumption of fossil fuels blamed for stoking global warming.')

⁵ For example, statement by UNEP Executive Director Achim Steiner at UAE-hosted Inaugural Conference on Partnership for Action on Green Economy, 4 March, 2014.

⁶ World Bank Group President Jim Yong Kim Remarks at Davos Press Conference, 23 January 2014.

⁷ Svea Herbst-Bayliss, 'IMF's Lagarde eyes subsidies, simple things to tackle climate change', *Reuters*, 4 March 2016.

as ‘perverse’,⁸ ‘incoherent’,⁹ a ‘hand brake’ to a sustainable energy future,¹⁰ and the ‘missing piece in the climate change puzzle’.¹¹

Fossil fuel subsidy reform has been on the international policy agenda since the 1970s, but in the last ten years its profile has soared. Since 2010, specialist NGOs have produced over 100 dedicated reports on fossil fuel subsidies and subsidy reform supplemented by over 50 reports on the topic by intergovernmental organisations (IGOs) such as the IEA, OECD, IMF, World Bank, Group of Twenty (G20) and Asia-Pacific Economic Cooperation (APEC). During this period there have been over 80 articles in academic journals, at least eight books, and many symposia and conferences.¹² Within a short period, fossil fuel subsidy reform has emerged from its status as a niche issue – the domain of a small group of economists and public policy analysts – to a topic high on the agenda for a wide range of international and domestic institutions, academics from multiple disciplines, and work programmes of many non-governmental organisations (NGOs).

Within the proliferating literature on fossil fuel subsidy reform, analysts and scholars have approached the topic from diverse angles. Economists have explored the economic foundations for this class of subsidies,¹³ offering prescriptions for their removal.¹⁴ Specialist NGOs such as the Geneva-based Global Subsidies Initiative (GSI), Washington-based Oil Change International

⁸ Norman Myers, ‘Lifting the Veil on Perverse Subsidies’ (1998) 392 *Nature* 327.

⁹ Statement by Tim Groser, New Zealand Minister Responsible for International Climate Change Negotiations (2010 United National Framework Convention on Climate Change Negotiations, Cancun, Mexico, 29 November to 10 December 2010).

¹⁰ Comment by IEA chief economist Fatih Birol, reported in *Gulf Times*, Qatar 22 January 2012.

¹¹ Report on the high-level discussion “The Missing Piece? Climate Change Mitigation and the Benefits of Fossil Fuel Subsidy Reform,” an official side event of the 17th Conference of the Parties to the UN framework Convention on Climate Change held on December 7, 2011 in Durban, South Africa: Ivetta Gerasimchuk and Natalia Zamudio, *Following the Money: Fossil Fuel Subsidy Reform En Route from Durban to Rio+20* (Global Subsidies Initiative of the International Institute for Sustainable Development 2012).

¹² These numbers are for publications *solely* or *primarily* concerning fossil fuel subsidies. Within the broader energy, climate change, international trade and environmental fiscal policy literature, discussions on fossil fuel subsidies are ubiquitous.

¹³ See generally, Ch 3 ‘Operation and Critiques of Fossil Fuel Subsidies’.

¹⁴ A selection includes: Andrew Cheon and others, ‘Why Do Governments Subsidize Gasoline Consumption? An Empirical Analysis of Global Gasoline Prices, 2002–2009’ (2013) 56 *Energy Policy* 382; OECD, *Environmentally Harmful Subsidies: Challenges for Reform* (OECD 2005); Benedict Clements and others, ‘Energy Subsidies: How Large Are They and How Can They Be Reformed?’ (2014) 3 *Economics of Energy & Environmental Policy*; Jon Strand, *The Economics and Political Economy of Energy Subsidies* (John Strand (ed), MIT Press 2016).

(OCI) and London-based Overseas Development Institute (ODI) have conducted empirical analyses of country- and industry-specific instances of subsidy reform, documenting lessons learned and best practices which might be applied to other jurisdictions and circumstances.¹⁵ International trade scholars have examined and critiqued legal and institutional components of the global trade framework, inquiring as to the scope for disciplining fossil fuel subsidies under existing and potential rules and processes within the World Trade Organisation (WTO) and trade regime.¹⁶ Scholars from academic disciplines of international law, international relations and political science have investigated a range of legal, political economy and other perspectives on fossil fuel subsidies.¹⁷

The literature suggests that there are many factors at play for ‘successful’ (and ‘unsuccessful’) energy subsidy reform. They include: the historical circumstances which led to a particular subsidy being introduced in the first place; how subsidy reform is approached (including whether removal of a particular subsidy is accompanied by offsetting policies, how it is communicated, and the manner in which domestic political negotiations around subsidy reform are conducted), international prices for fossil fuels at relevant times, the availability of energy alternatives and others.

¹⁵ GSI maintains comprehensive online library of resources on fossil fuel subsidies and fossil fuel subsidy reform including policy briefs, regional overviews, case studies and research papers at <https://www.iisd.org/gsi/resources>, accessed 10 January 2019. The OCI undertakes research on international fossil fuel finance including subsidies, maintaining an online database on fossil fuel finance from multilateral development banks and bilateral financial institutions in G20 countries, available (together with OCI reports and material) at <http://priceofoil.org/fossil-fuel-subsidies/> accessed 10 January 2019. For material on fossil fuel subsidies and energy policy published by the ODI, see <https://www.odi.org/publication> accessed 10 January 2019.

¹⁶ For example: HB Asmelash, ‘Energy Subsidies and WTO Dispute Settlement: Why Only Renewable Energy Subsidies Are Challenged’ (2015) 18 *Journal of International Economic Law* 261; Sadeq Z Bigdeli, ‘Will the Friends of Climate Emerge in the WTO: The Prospects of Applying the Fisheries Subsidies Model to Energy Subsidies’ [2008] *Carbon & Climate L Rev* 78; Robert Howse, ‘Climate Mitigation Subsidies and the WTO Legal Framework’ [2010] International Institute for Sustainable Development Winnipeg, Manitoba; Timothy Meyer, ‘Energy Subsidies and the World Trade Organization’ (2013) 17 *ASIL Insights* 1.

¹⁷ Kym Anderson, *The Political Economy of Coal Subsidies in Europe* (11, Centre for International Economic Studies, University of Adelaide 1994) vol 94; Simon Commander, *A Guide to the Political Economy of Reforming Energy Subsidies* (Policy Paper No. 52, IZA (Institute for the Study of Labor) 2012); Thijs Van de Graaf and others (eds), *The Palgrave Handbook of the International Political Economy of Energy* (Palgrave Macmillan UK 2016); Gabriela Inchauste and David G Victor (eds), *The Political Economy of Energy Subsidy Reform* (The World Bank 2017). Strand (n 14).

1.2 RESEARCH AIMS

This book joins the growing corpus of scholarship on fossil fuel subsidies. It includes a component of technical legal, economic and policy analysis, but my intention is not simply to synthesise existing doctrinal studies. My overall aim is to identify and critique one strand of the complex tapestry of fossil fuel subsidy reform: the existing and potential future role of *international law*, which I interpret to include international governance arrangements, as well as what has been described as ‘soft’, or ‘informal’ law.¹⁸ I acknowledge at the outset that the international law and governance framework is but one of many aspects of fossil fuel subsidy reform. It may not be the most important one.

Within that overarching aim there are five sub-objectives. The first is to critically examine a position which is taken as assumed in much of the fossil fuel subsidy reform literature: to what extent is the practice of government support for fossil fuel production and consumption an appropriate subject for international law? Answering this question confronts the preliminary, contested, and critical issue of how to define ‘subsidy’, as well as assessing the potential *legitimate* role of fossil fuel subsidisation alongside well-documented negative fiscal, trade and environmental effects. At the outset, I acknowledge that the act of defining a particular set of government policies as ‘international’ in nature is a performative act, with material political and distributive implications: what has been referred to as the ‘ubiquitous struggle [that] sometimes constructs problems as global in the first place (while others remain local or national)’.¹⁹

The second objective is to provide an empirically-informed account of existing international law sources, mechanisms, initiatives and institutions which, in various ways, address and affect the practice of subsidising fossil fuel consumption and production – a process that has been described as ‘mapping the channels and levers of influence and public capacity’.²⁰ This mapping exercise reveals the fragmented terrain of international law and policy concerning fossil fuel subsidies, involving multiple international and domestic actors, legal, policy and cultural frameworks, sometimes working together, sometimes working in opposition to each other, sometimes operating in apparent ignorance of other actors/regimes. This part of the research also draws on scholar-

¹⁸ See Ch 4 below.

¹⁹ Samuel Moyn, ‘Knowledge and Politics in International Law (Book Review)’ (2016) 129 *Harv L Rev* 2164, 2171.

²⁰ David Kennedy, ‘Preface to New Approaches to International Law: The European and the American Experiences’ in José María Beneyto and others (eds), *New Approaches to International Law: The European and the American Experiences* (2013 edn, TMC Asser Press 2014) vii.

ship on ‘new’ or ‘experimentalist’ governance²¹ and ‘informal’ international law-making²² with a particular focus on the emerging role of international peer review processes in relation to fossil fuel subsidies.

The third objective is to assess legal frameworks so mapped, with reference to three primary criteria of ‘effectiveness’, ‘legitimacy’ and ‘fairness’. In doing so, I offer suggestions, and consider suggestions of others, for how the international law framework (or at least components of it) could be built upon and developed in order to more effectively, legitimately and equitably respond to the practice of subsidising fossil fuel consumption and production.

The fourth objective is to contribute to emerging understandings of the role of regimes and regime interaction in a fragmented international legal system by applying insights reached in relevant scholarly works to the functional area of fossil fuel subsidies.²³ Recognising that not all consequences of international law fragmentation are negative,²⁴ I first examine whether there are any *positive* features of fragmentation/regime interaction in the fossil fuel subsidies context before considering the potential *negative* implications.

The fifth – openly normative – objective is to consider what strategies might be adopted to address any deficiencies and shortcomings identified while addressing the third and fourth objectives above.

²¹ For example, Gráinne de Búrca and Joanne Scott, *Law and New Governance in the EU and the US* (Bloomsbury Publishing 2006); Kenneth Armstrong and Claire Kilpatrick, ‘Law, Governance, Or New Governance? The Changing Open Method Of Coordination’ [2007] *Colum J Eur L* 649; Charles F Sabel and Jonathan Zeitlin, *Experimentalist Governance in the European Union: Towards a New Architecture* (OUP 2010).

²² Joost Pauwelyn and others (eds), *Informal International Lawmaking* (Oxford University Press 2012); Ramses A Wessel, ‘Informal International Law-Making as a New Form of World Legislation?’ (2011) 8 *International Organizations Law Review* 253; Gregory Shaffer and others, ‘Can Informal Law Discipline Subsidies?’ [2015] *Journal of International Economic Law* 711.

²³ As noted by Young, one of the conclusions of the International Law Commission’s major treatise on the fragmentation of international law was a call for further research on ‘the notion and operation of “regimes”’. Margaret A Young (ed), *Regime Interaction in International Law: Facing Fragmentation* (Cambridge University Press 2012) 4; ILC Study Group (Martti Koskenniemi, Chair), ‘Fragmentation Of International Law: Difficulties Arising From The Diversification And Expansion Of International Law’ (2006) 249.

²⁴ See, e.g., Martti Koskenniemi, ‘Hegemonic Regimes’ in Young, *ibid.*, 323. (‘International lawyers often speak as if the smooth functioning of mainstream international institutions were an unmitigated good. This, as Kennedy has shown, is often an ideological or cultural choice that may actually contribute to the problems it hopes to resolve.’)

1.3 WHAT MAKES FOSSIL FUEL SUBSIDIES AN APPROPRIATE SUBJECT FOR INTERNATIONAL LAW?

I provide selective accounts of the history (or histories) of the emergence of fossil fuel subsidies, together with a survey of the outcomes of recent comprehensive reviews of the nature, distribution and volume of fossil fuel subsidies within the body of this book.²⁵ However, for the purposes of this introductory chapter, a brief overview is appropriate.

What amounts to a ‘fossil fuel subsidy’ is a foundational issue for any serious inquiry in this area. Whether seeking to track the nature, amount and global distribution of fossil fuel subsidies (in what kinds of countries and for what kinds of industries do they occur? Is their use growing or contracting?) clarity as to the definition of the subject matter is, one would think, essential and given. But in much of the published commentary, and in particular, material provided by groups ostensibly intent on their rapid removal, it is not. As discussed in Chapter 3, this fluid approach to defining subsidies also flows on to descriptions of the particular kinds of subsidies seen as necessary to eliminate. Lack of clarity around definitions has been identified as a significant factor impeding effective reform.

Fossil fuel subsidies have been categorised in various ways, but I highlight two important types at this point. The first – ‘consumer’ or ‘consumption’ subsidies – describes forms of government support which, put simply, make fuel cheaper for consumers. These types of subsidies tend to be most prevalent in developing countries, particularly ones with significant fossil fuel production and export capacity. In 2018, the IEA estimated that globally, fossil fuel consumption subsidies in 2017 amounted to approximately \$300 billion annually.²⁶

The second category is ‘producer’ or ‘production’ subsidies. As I have noted elsewhere,²⁷ these are various forms of government support for the fossil fuel industry often hidden within layers of complex tax, favourable royalty, insurance or other indirect means of support. Like consumption subsidies, they alter the market by making it easier for firms to enter and operate within the fossil fuel exploration, production and processing sector, implicitly gaining a competitive advantage over non- or less-subsidised industries, such as renewables.

²⁵ In particular, Ch 2.

²⁶ International Energy Agency, *World Energy Outlook 2018* (International Energy Agency 2018) 55.

²⁷ Vernon Rive, ‘Fossil Fuel Subsidy Reform: A New Zealand Perspective on the International Law Framework’ (2016) 27 *NZULR* 73, 77.

This is the form of fossil fuel subsidy most prevalent in developed countries and ‘economies in transition’, including the United States, Europe, Australia, and Russia. A 2016 report jointly published by ODI and OCI estimated that within the G20 country-grouping alone, an estimated \$70 billion is spent annually subsidising fossil fuel production,²⁸ supplementing earlier analysis by the GSI estimating global production subsidies at \$100 billion annually.²⁹

As I discuss in Chapter 2, governments have supported the production and consumption of fossil fuels in financial and other ways for many years, and for reasons which can be seen as a natural and unobjectionable aspect of government activity pursuant to sovereign rights and international law to regulate access to and exploitation of natural resources. Identifying, developing and enhancing sources of fossil fuel energy have historically been regarded as legitimate and appropriate fiscal and regulatory policy for reasons of domestic energy security and economic development.³⁰ On the consumption side, price control and other forms of government support for fossil fuel consumption were standard fare in many countries: a means of shielding citizens and businesses from the disruption of domestic and international price spikes, as well as a conventional fiscal tool for welfare support for citizens.³¹

Why then, have fossil fuel subsidies recently become a *bête noire* of international economic and environmental policy? As with other global collective action issues of this nature, a number of interrelated factors can be identified. The potential exists for multi-layered levels of explanation: accounts publicly promoted, and factors which typically receive less open attention.

As early as the 1970s, before climate change had entered the public consciousness, concerns had been expressed about the negative impacts of fossil fuel subsidies.³² Reasons included the elementary economic principle that government interference with market prices for fossil fuels through artificial

²⁸ Elizabeth Bast and others, *Empty Promises - G20 Subsidies to Oil, Gas and Coal Production* (Overseas Development Institute and Oil Change International 2015) 11. The \$444 billion was broken down into: national subsidies delivered through direct spending and tax breaks of \$70 billion; investments by majority state-owned enterprises of \$286 billion; and public finance from majority government-owned banks and financial institutions of \$88 billion per year on average in 2013 and 2014.

²⁹ *Achieving the G-20 Call to Phase Out Subsidies to Fossil Fuels* (Global Subsidies Initiative of the International Institute for Sustainable Development 2009) 2.

³⁰ Salvatore Lazzari, *Energy Tax Policy: History and Current Issues* (US Congressional Research Service 2008); Anndy Kroll and others, ‘There Will Be Subsidies: A Brief History of Tax Breaks for Oil Companies’ [2014] Mother Jones.

³¹ For example John F Helliwell and others, ‘Oil and Gas Taxation’ (1988) 26 *Osgoode Hall LJ* 453.

³² For example, Edward A Hudson, ‘Optimal Extraction of Energy Resources’ (1977) 11 *New Zealand Economic Papers* 1.

price restraints or support (whether for production or consumption) would lead to excessive levels of demand (and consequentially consumption).³³ Localised environmental pollution was a factor,³⁴ but the underlying concern with fossil fuel subsidies tended to focus on issues of fiscal prudence (what could these public funds better be spent on?)³⁵ and excessive consumption impacting on energy conservation and security.³⁶ During this first phase of public policy analysis of fossil fuel subsidies, the potential for distortion of the international trade system was identified, but did not feature significantly.³⁷

From the early 1990s, the link between increased production and consumption of fossil fuels and greenhouse gas emissions featured increasingly in policy analyses of fossil fuel subsidies.³⁸ Although localised environmental pollution and fiscal responsibility continue to be cited in most of the literature on fossil fuel subsidies, by midway through the second decade of the 21st century, climate change was a dominant factor driving calls for the elimination and rationalisation of fossil fuel subsidies.³⁹

As noted, historically, government policies and regulatory arrangements for support of domestic fossil fuel production and consumption were regarded as a routine issue of sovereign decision-making, for each state to determine according to its own priorities. What then, might take that exercise of sovereign domestic power into the international realm, open to critique and potentially, ultimately, the constraints and disciplines of an *international* regulatory framework?

There are three leading justifications for treatment of fossil fuel subsidies as ‘fair game’ for *international* negotiation and regulation. The first is the potential distortion of international trade flows that can result from govern-

³³ *ibid.*, 15.

³⁴ Lucas Reijnders, ‘Subsidies and the Environment’ in R Gerritse (ed), *Producer Subsidies* (Pinter 1990) 112.

³⁵ Jeffrey H Hacker, *Government Subsidy to Industry* (Franklin Watts 1982) 63.

³⁶ Hudson (n 32) 15; David Heald, ‘UK Energy Policy: Economic and Financial Control of the Nationalized Energy Industries’ (1981) 9 *Energy Policy* 99.

³⁷ For example, Warren F Schwartz and Eugene W Harper, ‘The Regulation of Subsidies Affecting International Trade’ (1972) 70 *Michigan Law Review* 831, n 47.

³⁸ For example, Lucas Reijnders (n 34) 112; Bjorn Larson and Anwar Shah, *World Fossil Fuel Subsidies and Global Carbon Emissions* (WPS, World Bank Publications 1992); André De Moor, ‘Subsidizing Unsustainable Development: Undermining the Earth with Public Funds’ (1997); Myers (n 8). CP van Beers and APG de Moor, *Addicted to Subsidies: How Governments Use Your Money to Destroy the Earth and Pamper the Rich* (IOO 1999).

³⁹ Of the many examples, one publication from a UN programme is Anja von Moltke and Fulai Sheng, *Reforming Energy Subsidies: Opportunities to Contribute to the Climate Change Agenda* (UNEP 2008).

ment subsidies for fossil fuel consumption and production.⁴⁰ Initially under the General Agreement on Tariffs and Trade 1947 (GATT),⁴¹ and as substantially developed under the Uruguay Round WTO agreements (in particular, the 1995 Agreement on Subsidies and Countervailing Measures (ASCM)),⁴² a system of international regulation of particular forms of subsidies has progressively emerged. This international attention to subsidies, in theory at least, covers some of the forms of fossil fuel subsidies which have been the focus of state and non-state actor interest in recent years. In practice, this could lead to a dispute at the WTO and Chapter 5 provides a detailed analysis of the legal arguments that could be mounted. The ability (or lack thereof) of the existing WTO subsidy-discipline framework to meaningfully confront fossil fuel subsidies⁴³ is one of the key themes of the WTO-focused literature on fossil fuel subsidies and is discussed in detail in Chapter 5 of this book.

A second justification for international subsidy disciplines is sometimes described as a ‘willing tying of hands’ rationale.⁴⁴ International rules on domestic subsidies may assist governments in standing up to domestic interests seeking favourable treatment and resisting subsidy reform.

The third justification is the cross-boundary environmental effects of greenhouse gas emissions now routinely associated with ‘wasteful’ consumption resulting from fossil fuel subsidies.⁴⁵ The proposition that no sovereign state should engage in or permit activities under its national jurisdiction which causes material harm to the environments of other sovereign states, or within the global commons, has entered the collection of ‘emerging principles’ of international law, at least since the *Trail Smelter* arbitration,⁴⁶ with significant

⁴⁰ Howse (n 16) 9; Chris Wold and others, ‘Leveraging Climate Change Benefits through the World Trade Organization: Are Fossil Fuel Subsidies Actionable?’ (2011) 43 *Geo J Int’l L* 635.

⁴¹ General Agreement on Tariffs and Trade 1947 (General Agreement on Tariffs and Trade (Organization)) (entered into force 1 January 1948) 55 UNTS 194.

⁴² WTO Agreement on Subsidies and Countervailing Measures (entered into force 1 January 1995) 1869 UNTS 14.

⁴³ For example, Meyer (n 16). Asmelash (n 16).

⁴⁴ Steenblik et al. employ a memorable analogy from Greek mythology in this regard: ‘Just as Odysseus tied himself to the mast of his ship to resist the chant of the Sirens, governments may seek to “tie their own hands” at the supra-national level in order to resist domestic pressures for maintaining or increasing subsidies.’ Ronald Steenblik and others, ‘Fossil Fuel Subsidies and the Global Trade Regime’ in Jakob Skovgaard and Harro van Asselt (eds), *The Politics of Fossil Fuel Subsidies and Their Reform* (Cambridge University Press 2018) 123.

⁴⁵ Above, n 37.

⁴⁶ *Report of Arbitral Award Trail Smelter Case 1938 (United States, Canada)* (1941) 9 ILR 315. See also *Advisory Opinions on the Legality of the Use by a State of Nuclear Weapons in Armed Conflict*, ICJ Reports (1996) 66 (WHO) and 226 (UNGA);

boosts in the 1972 Stockholm Declaration⁴⁷ and 1992 Rio Declaration.⁴⁸ The ‘no-harm’ principle underpins the United Nations Framework Convention on Climate Change (UNFCCC)⁴⁹ as well as other international conventions such as the 1985 Vienna Convention on the Protection of the Ozone Layer,⁵⁰ and has been recognised by the International Law Commission.⁵¹

In critical analyses of international climate change law and policy, some commentators have suggested that there are other drivers for the direction and content of international instruments and practices. In Chapter 7 I explore the extent to which international positioning on fossil fuel subsidies on the part of some international actors might be (less openly) motivated by self-interested trade objectives, and if so, the implications, if any, of those insights.⁵²

Gabcikovo-Nagymaros Project (Hung. v. Slov.), 1997 I.C.J. 7; *Pulp Mills on the River Uruguay (Argentina v Uruguay)* (Judgment) [2010] ICJ Rep 2010.

⁴⁷ For an account of the 1972 Stockholm Conference and its contribution to international environmental law and governance, see Edith Brown Weiss, ‘The Evolution of International Environmental Law’ (2011) 54 *Japanese YB Int’l L* 1, 4–6.

⁴⁸ Rio Declaration on Environment and Development (adopted 13 June 1992, entered into force 13 June 1992) UN Doc A/CONF.151/26 (vol I) / 31 ILM 874 (1992).

⁴⁹ Recital 8 of the Preamble to the UN Framework Convention on Climate Change states:

Recalling also that States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction’ (emphasis added).

United Nations Framework Convention on Climate Change (opened for signature 4–14 June 1992, entered into force 21 March 1994) 1771 UNTS 107.

⁵⁰ Recital 2 of the Preamble is almost identical to Recital 8 of the UNFCCC. Vienna Convention for the Protection of the Ozone Layer (opened for signature 22 March 1985, entered into force 22 September 1988) UNTS 323; 26 ILM 1529 (1987).

⁵¹ See generally, Gerhard Hafner and Holly L Pearson, ‘Environmental Issues in the Work of the International Law Commission’ (2001) 11 *Yearbook of International Environmental Law* 3.

⁵² The author has written previously on this matter, including in Rive (n 27) 88, 101; Vernon Rive, ‘Anatomy of an International Norm Entrepreneur: The Friends of Fossil Fuel Subsidy Reform’ in Jakob Skovgaard and Harro Van Asselt (eds), *The Politics of Fossil Fuel Subsidies and Their Reform* (Cambridge University Press 2018) 161.

1.4 APPROACH TO THE ASSESSMENT OF INTERNATIONAL LAW, GOVERNANCE AND INITIATIVES CONCERNING FOSSIL FUEL SUBSIDIES

Within the existing literature on fossil fuel subsidy reform, and in a number of places in this book, assessments are made of the existing and potential future components of the international law and governance framework as well as particular instances of attempted fossil fuel subsidy reform.⁵³ Three common criteria frequently appear within such assessments and, as indicated above, are referred to in this book: effectiveness, legitimacy, and fairness. Some assessments acknowledge and confront the complexity inherent in attempts to assess international laws, policies, institutions and initiatives against these criteria.⁵⁴ In much of the literature however, there is little or no attempt to unpack inevitably loaded terms such as ‘effective’, ‘legitimate’ or ‘fair’, treating their meaning as given, understood and universal, or implicitly adopting a one-dimensional measure of reform success – the elimination of subsidies. As the authors of one widely cited publication put it:⁵⁵ ‘there is clear evidence that FFSs have detrimental effects. Thus the question for policymakers is not whether to reform subsidies, but how’.

A starting point for my analysis of existing and potential future components of the international legal framework concerning fossil fuel subsidies is the acknowledgement of observations made by a number of political science and international relations theorists: assessments of effectiveness, legitimacy and fairness of laws, institutions, policies and initiatives are complex, contestable,

⁵³ On an assessment of the existing international trade framework, see for example, Asmelash (n 16). Ronald Steenblik and others (n 44). On the existing UNFCCC framework, see, for example, Harro van Asselt and others, ‘Fossil Fuel Subsidies and the Global Climate Regime’ in Jakob Skovgaard and Harro van Asselt (eds), *The Politics of Fossil Fuel Subsidies and Their Reform* (Cambridge University Press 2018); For examples of assessments of fossil fuel subsidy reform initiatives, see: Michelle Scobie, ‘Actors, Frames and Contexts in Fossil Fuel Subsidy Reform – The Case of Trinidad and Tobago’ in Skovgaard and van Asselt, *ibid.*; Carlo Sdravovich and others, *Subsidy Reform in the Middle East and North Africa: Recent Progress and Challenges Ahead* (International Monetary Fund 2014).

⁵⁴ An example of a multifaceted assessment is Kathryn Chelminski, ‘Fossil Fuel Subsidy Reform in Indonesia – The Struggle for Successful Reform’ in Skovgaard and van Asselt, *ibid.*

⁵⁵ Jun Rentschler and Morgan Bazilian, ‘Principles for Designing Effective Fossil Fuel Subsidy Reforms’ (2017) 11 *Review of Environmental Economics and Policy* 138, 142.

affect multiple constituencies, and often involve what has been described as a ‘political process of competing interpretations of ambiguous events’.⁵⁶

Some commentators, confronted with the inherent indeterminacy of assessment criteria, have concluded that it would be an exercise of scholarly futility or folly to enter that arena. I have endeavoured to resist that position of analytical paralysis brought on by what Boyne has described as a ‘post-modernist morass of extreme relativism’.⁵⁷

1.4.1 Climate Justice Considerations of Fossil Fuel Subsidy Reform

In evaluating fossil fuel subsidies and the role of international law and fossil fuel subsidy reform, I have been attentive to the, at times, uneasy relationship between global governance responses to climate change and international trade ‘distortion’, and broader considerations of development and equity. As recognised by a number of commentators in this area, in many parts of the world, access to energy is a major welfare issue – the IEA has reported that approximately 1.6 billion people have inadequate access to electricity.⁵⁸ As discussed in Chapter 3, a high proportion of fossil fuel consumption subsidies disproportionately benefit wealthy members of society, but the fact that there is significant inequality globally on access to energy remains an important consideration for a study such as this. A related matter is the role that energy plays in wider geopolitical interactions. As Lesage and Van de Graaf have noted, ‘energy is of the utmost strategic importance for nation states’ economies, militaries and domestic social peace’.⁵⁹ The role of fossil fuel subsidies in contributing to sovereign nations’ international and domestic security is a relevant consideration for international initiatives to phase out subsidies, a matter especially relevant to larger powers who in the past have not been hesitant to intervene in domestic affairs of smaller states.

There is also a compelling (but often overlooked) climate equity element to addressing production subsidies alongside consumption subsidies, explored briefly in Chapter 7. It is also appropriate for international policymakers from developed countries, together with the OECD and developed-country members of institutions such as the IEA, G20 and APEC, to reflect on the

⁵⁶ David Marsh and Allan McConnell, ‘Towards A Framework For Establishing Policy Success’ (2010) 88 *Public Administration* 564, 570.

⁵⁷ George A Boyne, ‘What is Public Service Improvement?’ (2003) 81 *Public Administration* 211, 222.

⁵⁸ Dries Lesage and Thijs Van de Graaf, *Global Energy Governance in a Multipolar World* (Ashgate Pub Co 2010) 2.

⁵⁹ *ibid.*, 3.

extent to which their own governments are complicit in significant fossil fuel production and consumption.

1.5 IMPLICATIONS OF FRAGMENTATION AND REGIME INTERACTION IN THE FOSSIL FUEL SUBSIDY REFORM CONTEXT

As noted above, one of the objectives of the book is to consider whether the theoretical and practical implications of fragmentation and regime interaction addressed in an evolving body of scholarship (positive and negative) are reflected to a greater or lesser extent in the international fossil fuel subsidy reform context.

Concerning potential positive features of fragmentation/regime interaction, fieldwork and interviews conducted at, and on the margins of, UNFCCC conferences of the parties (COPs) between 2011 and 2015 were revealing. As discussed in Chapter 9, significant opportunities for what has been described as ‘open cross-forum experimentation’⁶⁰ and ‘pluralist dialogue’⁶¹ were observed. In Chapter 7, I also outline examples of inter-regime ‘productive friction’ at UNFCCC COPs. At a GSI-hosted site event during COP19, Warsaw in 2013, clear differences in position on the relative importance of addressing fossil fuel production subsidies over consumption subsidies publicly emerged between the then-New Zealand Minister of Climate Change (and de facto leader of the Friends of Fossil Fuel Subsidy Reform (FFFSR)), the Hon. Tim Groser and then-OECD Environment Director, Simon Upton.⁶² FFFSR and New Zealand subsequent positioning on that issue has noticeably evolved. Two years later at UNFCCC COP21 in Paris, New Zealand was awarded ‘fossil of the day’ by the Climate Action Network for ‘urging countries to phase out fossil fuel subsidies’ while maintaining production subsidies on the order of tens of millions of USD⁶³ – an event which, with other public NGO and academic criticism, is likely to have contributed to a decision to undertake a comprehensive review of New Zealand domestic support measures for fossil fuels in 2018.

⁶⁰ Margaret A Young, *Trading Fish, Saving Fish: The Interaction Between Regimes in International Law* (Cambridge Studies in International and Comparative Law, Cambridge University Press 2011), 275.

⁶¹ Timothy Meyer, ‘The Architecture of International Energy Governance’ in *ASIL Annual Meeting Proceedings* (JSTOR 2012) 391.

⁶² The interaction was reported on by the author in Vernon Rive, ‘Friends with Benefits: Fossil Fuel Subsidies Debate at Warsaw Climate Talks’ [2013] *Idealog Magazine Online*.

⁶³ Vernon Rive, ‘The Good, the Bad and the Ugly: Fossil Fuel Subsidies at the Paris Climate Talks’ [2015] *Idealog Magazine Online*.

My empirical research has also identified a number of potentially negative features of fragmentation and regime interaction in the fossil fuel subsidy reform context. Echoing differences on organisational mandates which have arisen in other areas,⁶⁴ clear ‘forum query’ challenges have arisen concerning the prospects of including fossil fuel subsidy reform on the agenda of the WTO, including at WTO Committee on Trade and Environment (CTE) meetings between 2016 and 2018. In Chapters 6 and 9, I discuss the implications of the public opposition expressed by representatives of Saudi Arabia and Venezuela to proposals by New Zealand, the FFFSR and aligned members to include fossil fuel subsidy reform on the WTO negotiating agenda. Other issues discussed include: ambiguities in contestable terms, inconsistent standards and definitions on core concepts, questions of provision for participation by non-state actors and affected parties and issues as to transparency of process.

1.6 SCOPE AND METHODOLOGY

Like other scholarly reviews⁶⁵ this analysis involves an institutional component which (for appropriate reasons) was not embarked upon by the International Law Commission in its 2006 fragmentation study.⁶⁶ The institutional component of the analysis involves enquiring into the degree and nature of interactions between the relevant regimes, potential for normative conflict and/or ‘fruitful interaction’⁶⁷ as well as the availability of strategies for addressing any negative aspects of regime interaction. My institutional analysis involved international empirical investigations including an examination of norms and practices of the WTO, OECD, IMF, G20, APEC and other relevant international and national bodies, a number of representatives of which have been interviewed.

⁶⁴ On forum challenges in the WTO fisheries subsidy reform context, see Young (n 60) 89 and following.

⁶⁵ For example, Beatriz Martinez Romera, *Regime Interaction and Climate Change: The Case of International Aviation and Maritime Transport* (Routledge 2018); Young, *ibid.*

⁶⁶ ILC Conclusions 2006. ILC, *Report of the Study Group, Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law: Conclusions* (A/CN.4/L.702) (18 July 2006).

⁶⁷ Margaret Young, ‘Introduction: The Productive Friction Between Regimes’ in Margaret Young (ed), *Regime Interaction in International Law: Facing Fragmentation* (Cambridge University Press 2012); Young, ‘Climate Change Law and Regime Interaction’ [2011] *Carbon & Climate L Rev* 147; Harro van Asselt, ‘Managing the Fragmentation of International Climate Law’ in Erkki J Hollo and others (eds), *Climate Change and the Law* (Springer Netherlands 2013) 1275.

Research has also included an examination of documentary material from the above institutions, case law, policy reports, briefing documents, submissions to international institutions such as the UNFCCC and WTO and transcripts from international conferences and presentations delivered by political representatives, officials, policy advisers and other commentators.

1.7 OUTLINE OF BOOK

There are two parts to the book.

1.7.1 Part I: Background

Following this introductory first chapter, Chapter 2 provides a representative overview of the history, nature, scale and distribution of fossil fuel subsidies globally. The content is relevant for a number of reasons. First, an understanding of the history and current practices of fossil fuel subsidies is important in its own right for a book whose focus is on the motivation for, and range and efficacy of, contemporary initiatives designed to discipline fossil fuel subsidies. Second, an appreciation of both the multiplicity of underlying objectives for government support – the reasons why fossil fuel subsidies were provided in the first place – helps inform perspectives on whether, and how, subsidy practices might be effectively curbed. Third, when considering the focus and attention directed by many current international actors and policy initiatives towards *particular* forms of government support for fossil fuels (including the focus on consumption subsidies in developing countries) it is relevant to consider historic and current practices of government support in developed and developing countries. That is not to say that what governments have done in the past is what they should do in the future. But keeping in mind what historical state practice has been (especially state practice on the part of those from developed nations now calling for significant changes on the part of other sovereign states) is important for a balanced assessment of emerging normative frameworks.

Included in Chapter 2 is a discussion of the vexed question of definition – what exactly is a ‘fossil fuel subsidy’? The definition of subsidy is important in a number of critical legal contexts, including WTO ASCM discussed in Chapter 5 and international peer review mechanisms discussed in Chapter 8. The distinction between consumption subsidies and production subsidies (policy responses to which have been the subject of interesting and intense debate at the international level) is expanded upon.

The book does not attempt a comprehensive analysis of the related international law and policy treatment of production and consumption subsidies for

renewable energy,⁶⁸ however an empirical review of the extent and value of renewables subsidies contrasted with fossil fuel subsidies is an important part of the ongoing international consideration of energy subsidy issues, and this is briefly addressed in Chapter 2.

Chapter 3 provides an overview of the economic, policy and legal critiques of fossil fuel subsidies, examining three basic (connected) questions: (1) What do fossil fuel subsidies do? (2) Why do governments provide and maintain them? and (3) Why are fossil fuel subsidies seen as harmful? This part of the book draws on scholarship and analysis from multiple disciplines (including law, economics, tax and public policy) in which an increasingly sophisticated understanding of the fiscal, developmental and environmental effects of various forms of fossil fuel subsidies has developed.

1.7.2 Part II: Mapping and Assessing International Law Responses to Fossil Fuel Subsidies

The second part of the book commences with Chapter 4, in which the fragmented nature of the international legal and institutional framework for oversight of energy subsidies is set out. A graphic overview of the legal and governance framework is presented in Figure 4.1 which illustrates in detail not only the proliferation of entities and initiatives in this area, but also the many connections between them. In Chapter 4, I examine key international institutions and sources of international law concerning fossil fuel subsidies (conventional and informal), including: the WTO; UNFCCC; and IGOs (OECD, IEA, IMF, World Bank and the G20, APEC). Recognising the growing influence of NGOs towards the development of international norms and law particularly in the environmental context, the role and relevant activities of a number of key international NGOs are reviewed, including the GSI, ODI and OCI. Chapter 4 also assesses the UNFCCC regime, including the system of Nationally Determined Contributions which to date has produced at least

⁶⁸ A selection of the growing collection of publications examining the treatment of renewable energy subsidies within the WTO framework includes: Asmelash (n 16); Marie Wilke, *Feed-in Tariffs for Renewable Energy and WTO Subsidy Rules: An Initial Legal Review* (ICTSD Global Platform on Climate Change, Trade and Sustainable Energy 2011) vol 4; L Rubini, 'Ain't Wastin' Time No More: Subsidies for Renewable Energy, The SCM Agreement, Policy Space, and Law Reform' (2012) 15 *Journal of International Economic Law* 525; Sadeq Z Bigdeli, 'Incentive Schemes to Promote Renewables and the WTO Law of Subsidies' in Thomas Cottier and others (eds), *International Trade Regulation and the Mitigation of Climate Change: World Trade Forum* (Cambridge University Press 2009).

five national commitments with some reference or commitment to fossil fuel subsidy reform.

Given the significance of the WTO framework to international subsidy oversight, I devote two chapters to a detailed examination of opportunities for fossil fuel subsidy reform within the WTO/international trade system. Chapter 5 assesses the existing GATT/WTO framework with particular focus on the ASCM, subsidy notification processes, and the Trade Policy Review Mechanism (TPRM). It includes a table of the likely legal arguments a complainant would make in a WTO dispute on fossil fuel subsidies. Chapter 6 assesses future opportunities for fossil fuel subsidy disciplines outside of the ASCM, commencing with an analysis of the scope of addressing fossil fuels subsidies in WTO accession processes before turning to preferential trade agreements (PTAs) including three representative regional trade agreements: the European Union – Singapore Free Trade Agreement (EU-Singapore FTA); Comprehensive Progressive Trans-Pacific Partnership Agreement (CPTPP); and Transatlantic Trade and Investment Partnership (TTIP). Chapter 6 also considers initiatives for reform of fossil fuel subsidy rules within the ASCM including the background to and prospects of a New Zealand-led initiative to introduce a set of new disciplines on fossil subsidies within the WTO.

Chapter 7 contains an examination and critique of the FFFSR. As the de facto leader of the FFFSR (providing secretariat-services alongside policy and organisational impetus) the particular role of New Zealand within the group is also examined.

Although there are a number of entities active internationally in promoting fossil fuel subsidy reform, the FFFSR is worthy of a more detailed examination for a number of reasons. First, the group is a recognised major player in this policy area, and its direct involvement in the development of what are emerging as key international fossil fuel subsidy reform initiatives allows appropriate attention to be given to those mechanisms. Second, as a bespoke intergovernmental entity which has close ties to existing intergovernmental organisations, influential NGOs, states directly (as well as departments and professional networks operating at the sub-state level), examination of the FFFSR provides an opportunity to examine contemporary theories and scholarship on emerging forms of international governance in this area as well as critical commentary on the role of experts and managerialism in international law (IL) and international relations (IR). Finally, because the FFFSR operates across and within the international trade regime and international climate change regime, as well as prominent centres of international finance and development such as the IMF and World Bank, the entity is a pertinent case study for examining the role of intergovernmental and trans-governmental actors in facilitating regime interaction.

Chapter 8 focuses on what are currently the most developed international initiatives for fossil fuel subsidy reform – pilot voluntary peer review (VPR) exercises within the G20 and Asia-Pacific Economic Cooperation (APEC). A focus of this chapter is the development of international peer-review frameworks, often regarded as an element of so-called ‘Experimentalist Governance’, ‘New Governance’, or ‘global pluralist governance’ processes. Peer review arrangements, such as those proposed under the G20 methodology, are not regarded as a complete solution to other notable shortcomings in the G20 commitment to fossil fuel subsidy reform; however, if managed appropriately have potential to enhance transparency and accountability in this area.

Chapter 8 also features an empirical study of eight VPRs that have taken place under G20 and APEC arrangements between 2014 and 2018 for which documentation is publicly available, covering four peer reviews under the G20 process (China, United States (US), Mexico and Germany) and four under the APEC process (Peru, New Zealand, Philippines and Chinese Taipei). I present and discuss the results of a high-level audit of all eight VPRs, including quantitative and preliminary qualitative assessments of the outcomes of peer reviews of a total of 78 consumption and production support measures, categorised into six broad outcome scenarios depicted in Figure 8.1, the results of which are summarised in Figure 8.2. As far as I am aware, this is the first attempt to examine, measure-by-measure, the approach and outcome of G20/APEC VPRs in this way.

Chapter 9 draws together much of the preceding discussion and offers provisional conclusions. I highlight insights reached throughout the book on *why* state and non-state actors have been willing to expend significant political and diplomatic capital on curbing domestic fossil fuel subsidy policies once regarded as the sole prerogative of national governments, as well as *how* the emerging frameworks for oversight of fossil fuel subsidies have been constructed, and are, or are not, operating. I also reflect on selected challenges, opportunities and innovations for responding to fossil fuel subsidies, highlighting pitfalls best avoided, and offering suggestions for consideration by existing and future policymakers as well as academic researchers.