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RESEARCH ARTICLE



## Beneath the insuperable barrier: accumulation, state managers and climate policy in Britain

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### ABSTRACT

This article presents the first archival case study of the drivers of UK climate policy and the creation of the UNFCCC. I contribute to the literature on the green state and green capitalism, firstly by arguing that existing approaches do not fully capture the state's and most importantly policymakers' position in capitalism. Secondly, there remains scope for more refined empirical examination of policymakers and how they navigate the contradictions of environmental policy. I address these weaknesses by analysing newly declassified British governmental documents through form-analytic Marxism, demonstrating the drivers behind the Thatcher government's climate policies and push for an international convention. I argue that policymakers occupy the site of the state's contradictory pressures, and thus find themselves 'beneath the insuperable barrier' as their commitment to accumulation and capitalist logics supercedes their drive to design ambitious environmental measures. This reveals fundamental tensions with policymakers' ability to address the climate crisis.

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### Introduction

From the 'new state capitalism' (Alami et al. 2022) to state-led green transitions (Haas 2021), the state is back (again). Scholars are increasingly considering the state's role in the environmental and climate crises which will shape the twenty first century, asking in particular whether the state and the capitalist economy may be greened, despite historical reliance on fossil-fuelled accumulation. Despite some differences in approaches, many have overall agreed on how difficult this will be (see for example Paterson 2016, Eckersley 2021, Huber 2022), noting how fossil fuels and natural capital extraction are enmeshed with capitalism and the state – thus posing an 'insuperable barrier' to the greening of the state and the economy

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(Davidson 2012, p. 36). This broadly shared view has generated a rich scholarship with various, sometimes diverging diagnostics of the specific how and why of (and thus how to remedy to) this ‘insuperability’ (for instance, Malm 2016, 2020, 2021, Heron and Dean 2022). Against this background, recent contributions have furthered our understanding of the economic and political obstacles to a green state in particular (Bailey 2020, Hausknost and Hammond 2020).

In this paper, I contribute to this literature on the green state, as well as wider scholarship on the green transition, by offering a new detailed analysis of the specific causes of the state’s difficulties with ambitious environmental and climate action, and more precisely of *how* policymakers navigate these difficulties. I first engage with the literature at the theoretical level: reviewing the diverse theories underpinning current scholarship, I contend that they do not provide an entirely satisfactory theorisation of the state’s – and those who staff it – intimate relationship with capitalism. In particular, current scholarship is yet to focus fully on policymakers as historical subjects, which can add to our understanding of the drivers of climate policy. To do just that, I advance a form-analytic Marxism which conceptualises the state and policymakers – state managers (Block 1977) – as the custodians of accumulation, in that they are primarily concerned with responding to market imperatives as well as preserving the broader capitalist tenets upon which the status quo rests.

Secondly and thirdly, I contribute to the literature methodologically and empirically. I outline the literature’s achievements so far, arguing that there remains room for developing new convincing interpretations of decision-making processes at the highest levels of the state, thereby answering Alami et al.’s call (2023, p. 3) for attempts to open ‘the proverbial “black box” of the state’. In the second section, I do so by providing the first (to my knowledge) archival study of the formulation of climate policy in the UK. Altogether then, I contribute to the green state debate by offering answers to not just *whether* the state can deal with the environmental crisis but especially *how* policymakers confront the daily tensions of environmental governance and end up operating ‘beneath the insuperable barrier’.

In an empirical section, I detail how British policymakers first formulated Britain’s insufficient climate policies. Beyond current accounts who have emphasised various factors – from lobbying to the Treasury’s power to neoliberal dogma – I argue that state managers have been first and foremost strongly constrained by the state’s role and position in capitalism. I shed light on this process, demonstrating that while they genuinely desired action on climate as early as 1988, British ministers, advisers and civil servants all rapidly eschewed any policies that constituted a threat to capital’s profitability and competitiveness, public spending restraint, inflation control and fossil-fuelled economic growth. Crucially, I show how British state managers

developed a rationale based on their commitment to market imperatives that justified shifting environmental action to the international realm and push for the creation of a weak United Nations Framework Convention on Climate Change (UNFCCC). In the conclusion, I reflect on these findings and the potential for alternatives.

### **Fossil-fuelled capitalism and the green state**

In recent years, scholars have asked with ever stronger urgency the crucial question of whether states and the capitalist economy can be ‘greened’. Ecological Modernisation (EM) scholars and eco-Marxists have long debated this issue (see Mol and Spaargaren 2000, Mol 2002). ‘Weak’ EM scholars (see Christoff 1996 for a distinction between ‘Weak’ and ‘strong’ EM) see ‘environmentally sound production and consumption’ as possible under capitalism, seeing potential for change in technological innovation as well as the increasingly entrenched environmental considerations and institutional developments in today’s societies (Mol and Spaargaren 2000). Strong EM proponents on the other hand agree with different shades of eco-Marxists that it is highly unlikely that state intervention and radical technological innovation can make capitalist accumulation compatible with environmental objectives (for a summary, see Paterson 2016, Hausknost 2020). Indeed, the environmental improvements of last century did not achieve anything close to systemwide sustainability, meaning more ‘wicked’ environmental issues now more visibly show the ‘glass ceiling’ (Hausknost and Hammond 2020, p. 3) to the greening of economy and state.

Eco-Marxists have similarly conceptualised an ‘insuperable barrier’ (Davidson 2012, p. 36), located in the relationship between capitalism, nature and the state. This contribution first sees fossil fuels entering the state-capital equation, as essential to the capitalist economy since the Industrial Revolution (for instance, Malm 2016), and secondly capital’s need to extract, use and discard ‘cheap natures’ since the colonial era (Moore 2016). Economic growth therefore became synonymous with expanded production and consumption of fossil energy and natural inputs, and the state evolved as the custodian of the ‘treadmill of production’, helping capital to continuously draw on, and add negatively to, nature (Schnaiberg et al. 2002, Davidson 2012).

Differences do exist on what this insuperability entails more precisely. Some Marxists see it as lying only with the logic of capital itself, rather than its entanglements with industrialism, European modernity and economic growth. For instance, Malm’s (2016) and Huber’s (2022) class-historical perspectives describe the contingent rise of distinctively capitalist logics in industries that they argue were once, and could still be, organised in an ecologically viable way. This leads Malm (2020) and especially Huber (2022)

to propose an ecomodernist Marxist blend which sees capital-intensive technology and production as able to stay within ecological boundaries. This goes against Marxist degrowthers (like Heron and Dean 2022, Heron 2024) who see the growth imperative and (neo-)colonialism as bound up with capitalism and the state in a structurally anti-ecological manner.

On the state more particularly, scholars have reflected on the precise barrier that it may pose and/or encounter in greening itself and the economy (see Paterson 2016). Historical sociologists emphasise how the bourgeoisie entered the state and imposed accumulation as a new ‘core imperative’ (Dryzek et al. 2003, pp. 1–2); constructivists see the state’s functions as partly ‘historically constituted necessities’ (Eckersley 2021, p. 253); while some Marxist accounts would see the state as ‘constitutionally incapable of going after the drivers’ of the environmental crises (Malm 2020, p. 84). Despite these divergences, across ‘strong’ EM (like Eckersley 2004, 2021, Barry and Eckersley 2005) and eco-Marxism there is broad agreement that fossil-fuelled capitalism ‘imprisons’ the state in many ways (Dryzek et al. 2003, pp. 13–14), thereby placing strong constraints on policymakers – but also that this can absolutely be challenged.

Building upon this diagnostic, a literature on the ‘green state’ has furthered our understanding of the failure of states (and related institutions) in Western and non-Western contexts to engage in ambitious environmental action (see Bäckstrand and Kronsell 2015, Hysing 2015, Death and Tobin 2017). From the limits of the Bank of England’s climate mandate (Jackson and Bailey 2023) to the contradictions of development policy and environmental management in Africa (Death 2016), the literature has quite successfully mapped many of the specific constraints on environmental policy. Nonetheless, as Alami et al. (2023, p. 3) observe, one challenge which remains is to unearth how these structural constraints *unfold* in practice for state managers.

Following Newell and Paterson (1998, pp. 691–2), a framework which can fulfil this task should return to the state’s main role in capitalism, which historically has been the promotion of accumulation. States became structurally dependent on capital’s investment in and management of the production process, as well as on employment provision and tax revenues from corporations, which simultaneously oils the wheels of the economy while guaranteeing the existence and legitimacy of the state itself. In this context, states will try and create a suitable ‘climate for business’, which entails rejecting any proposal that would affect the viability of carbon-intensive production and consumption (Newell and Paterson 1998, pp. 692–3). Newell and Paterson (1998) emphasise direct lobbying and the indirect pressure of fossil fuel interests on policymakers, as well as countries’ differentiated fossil fuel resources, notably to explain countries’ bargaining positions on climate negotiations.

Building upon this analysis, I contribute to the literature by proposing a form-analytic Marxism that forefronts wider capitalist imperatives and the state's relationship with capitalism, while illuminating how these weigh on policymakers' choices and makes them wrestle with climate policy objectives. Form-analytic Marxism conceptualises the state as a form concomitant to capitalism. In this view, the institutions of modern states developed contingently from class struggle to safeguard capital's interests from labour's attacks, chaotic economic relations, intra-capital conflict and regulate the competition process (Holloway and Picciotto 1977, Clarke 1988). Form analysis thus emphasises how states attempt to represent the interest of capital '*in general*' – a fiction which is really only the aggregate sum of particular capitals with their contradictory interests – while also dealing with the blind laws and contradictions of capitalism and the necessary continuation of *global* accumulation on the basis of their *national* constitution (Holloway and Picciotto 1977, Barker 1978, Clarke 1988).

In this context, states therefore feel compelled to respond to a range of overarching pressures. They watch *over* and intervene *into* their national economy, to maintain currency and fiscal credibility on financial markets by restraining public spending and cutting debt; preserving national competitiveness by making sure that capital is on par with world market productivity averages; and stabilising other parameters that are conducive to accumulation such as inflation (Burnham 2001, Copley and Moraitis 2021). Although they too are tamed by it, states actively manage the economy to let these capital-dominant logics and market imperatives express themselves as much as possible, to push economic actors towards competitiveness and profit while stabilising the system at large (Copley and Moraitis 2021). These dynamics have constrained climate policy historically, and now shape states' contradictory attempts to craft climate-friendly accumulation strategies in a context of protracted stagnation and geo-economic competition (Alami et al. 2023).

Against this background, the work of Fred Block allows us to recentre our analysis on the too often overlooked policymakers who navigate this complicated landscape. For Block (1977, 1980), the historical emergence of states as custodians of accumulation translates into a compulsion for a governing class to emerge as physically and analytically distinct from the capitalist class. These 'state managers' are those who staff the governmental and state apparatus, and are often not capitalists themselves. Block thus argued that 'the ruling class does not rule'; *it is state managers who do*, on behalf of capital – although not necessarily at its behest (Block 1977).

Indeed, despite widely different backgrounds and views, state managers become deeply homogenised and integrated within the state's institutional apparatus and its *raison d'être*. They feel the whip of external necessity intensely, and are strongly invested in responding adequately to general

capitalist imperatives and principles in order to maintain accumulation and capitalist relations at large through day-to-day governing decisions (Block 1977, pp. 10–12). This does not mean that state managers systematically succeed in smoothly deploying grand plans in capital's interests. Rather, capitalist imperatives often force policymakers to agree on a broad vision, but they frequently end up having to react to inter alia contradictory market forces, capital's pressures and workers' demands in often haphazard and ad-hoc ways (Block 1977, Alami et al. 2023, p. 4). Still, their strong commitment to business confidence and market discipline produces some consistency.

This also means the 'subsidiary' influences to which state managers are exposed, such as lobbying, are not a prime determinant of policy formulation (Block 1977, 1980). Thus, while governments' climate policies are indeed often 'consistent with the responses advocated by the energy industries', as Newell and Paterson (1998, p. 688) correctly argue, this kind of lobbying and influence is only 'the icing on the cake of class rule' (Block 1977, p. 14). Rather, in the absence of intervening factors, such as popular opposition, state managers' policies have a *tendency* to reflect their quasi-paradigmatic commitment to accumulation and capitalist logics (Block 1977, 1980). Hence, while dominant neoliberal values and typologies undoubtedly harm climate action (Hatzisavvidou 2020) – particularly in the British neoliberal 'heartland' – the glass ceiling of the state's ecological transformation can ultimately be located with the capitalist institutions and system that state managers are navigating. And while the Treasury's dominance – also in the British case – has clearly hampered green investment, as Craig (2020) demonstrates, I highlight that most (British) state managers will find themselves 'beneath the insuperable barrier' as they collectively identify environmental objectives as threats to fossil-fuelled accumulation and market confidence.

## Methodology

By adopting a form-analytic Marxism then, I provide a novel approach to the green state debate by focusing on state managers as the sites at which the state's contradictory pressures and logics play out, constituting a central obstacle to ambitious environmental policy. This contributes to the literature in two additional ways, methodologically and empirically. Indeed, while EM and critical scholars have offered rich theoretical and empirical discussions of the state and environmental policy (see Paterson 2016), this is still characterised by a rarity of elite interviewing (although see Jackson and Bailey 2023) or archival research. Epistemologically, I argue that archival research particularly can provide new interpretations of the thought processes and subsequent decision-making guiding climate policy. Thus, it can

provide a more refined understanding of how state managers face the daily tensions between accumulation and environmental protection.

I do this by deploying the framework developed above to the study of British governmental documents. Existing accounts have used other available evidence to analyse the Thatcher administration's climate policy through, *inter alia*, the lens of leadership roles and international norms (Cass 2006) or the influence of institutions and interest groups (Oshitani 2006). Using form-analytic Marxism and governmental documents instead allows the paper to foreground the wider logics of capitalism while refocusing the analysis on and *within* government. This is because governmental archival sources contain files generated during policy discussion and implementation by the core executive (ministers and the Cabinet) as well as the high-level officials and advisers who make up the state's policy networks (Kavanagh 1991). This gives a rare window into the conduct of state managers, allowing researchers to construct a plausible reading of events by asking the questions of the 'who', 'what', 'how' and especially the 'why' that research should focus on (Burnham et al. 2008, pp. 187–208). The documents analysed here were collected in 2021–2022 over the course of several fieldwork visits at the National Archives in London. They originate from the main departments responsible for the policy area under study: the Cabinet (CAB), the Prime Minister's Office (PREM), the Treasury (T) and the Foreign and Commonwealth Office (FCO). These documents were circulated confidentially for internal use at the time, then held as such under the 30-year rule, and finally declassified only recently, some as late as 2022.

### The Thatcher government's response to climate change, 1988–1990

It is well documented that the Thatcher government rose to power in 1979 with a uniquely clear diagnostic of the causes and remedies to the crisis of British capitalism (Gamble 1988). Global stagflation, rising international competition, the oil shocks, the collapse of Bretton Woods, rising wage and welfare costs all saw the Conservatives take over government with a strong determination to reverse declining profitability and competitiveness, and reimpose market discipline and capital's dominance (Gamble 1988, Clarke 1988). Thatcherites' continuous efforts in this direction for over a decade in government forms the crucial context against which to evaluate their stance towards climate objectives.

The first documents generated by the British state specifically on climate policy only start appearing in late 1988. Why? In 1988, climate change rapidly rose to prominence as a topic worthy of scientific and political attention on the national and international stage, with the formation of the Intergovernmental Panel on Climate Change (IPCC) as well as NASA scientist James Hansen's famous testimony to the United States Congress, all of



this amid an unprecedented heatwave in North America (Jaspal and Nerlich 2014, p. 124). In this context, the international community was forced to start addressing climate change. The British government was amongst those showing initiative, in part influenced by the newly created IPCC and international research networks, and Thatcher gave a now famous climate speech to the Royal Society in September 1988 (Boehmer-Christiansen 1995a, Cass 2006).

### **Domestic problems, international solutions: from carbon taxation to an international initiative**

The internal governmental response started in December 1988, when Margaret Thatcher instructed that an interdepartmental meeting of Ministers would take place in January to discuss the issue.<sup>1</sup> In a matter of weeks, the government's initial stance was assembled and before Christmas, the Cabinet Office expounded the government's position in a position paper: climate change was real – officials and ministers did not question the man-made character of global warming, and it was agreed across government that the remaining scientific uncertainties did not constitute an excuse for inaction.<sup>2</sup> The position paper thus acknowledged climate scientists' recommendations for deep cuts in CO<sub>2</sub>, methane, nitrous oxide and chlorofluorocarbons (CFCs) in order to stabilise emissions at current levels. Otherwise, the concentration of greenhouse gases (GHG) in the atmosphere was predicted to double between 2030 and 2100, eventually warming the planet by 1.5–4.5°C, unparalleled in 'historical experience'. Meanwhile, sea levels would rise by at least 20–140 cm, flooding large swathes of developing countries.<sup>3</sup>

Despite flatly accepting those warnings and broadly accepting the need for action, the dilemma of climate policy immediately imposed itself to the government:

The adverse effects of climate change are potentially catastrophic, but distant and uncertain. Governments cannot therefore stand back ... but it is of the greatest importance to bear in mind that unilateral action by any one country is unlikely to have a significant effect on climate change. ... moreover the country taking unilateral action damages its own competitiveness and allows others a 'free right'.<sup>4</sup>

In this context, internal discussions rapidly turned to the question of which policy instrument could be realistically adopted. The Treasury was in fact initially quite supportive of using the price mechanism to internalise polluters' costs,<sup>5</sup> and thus officials discussed Pigouvian taxes as early as January 1989. The December 1988 position paper had already compiled early discussions around carbon taxes and alternatives, to start addressing

GHG emissions and accelerate the UK's transition away from fossil fuels, in particular coal. Carbon capture and storage was ruled out, and instead the emphasis was put on increasing the share of gas and nuclear power in the electricity mix, improving energy efficiency and funding research for renewables.<sup>6</sup>

However, the challenge of addressing climate change rapidly pushed state managers to sideline any radical policy proposal. As Treasury officials noted:

the economic implications of action to prevent global warming are potentially immense ... [We need] actions taken or contemplated [to be] cost-effective and likely to achieve worthwhile results without having undesirable side-effects (for example on our competitive position), and that all concerned with the subject keep in the forefront of their minds the importance of the international dimension and international solutions, as against national policy initiatives.<sup>7</sup>

And indeed, as early as February, the government started envisioning an international initiative, which would supersede any domestic policy package. The administration thought it could pioneer a global convention while ensuring that its requirements could be met 'with as little difficulty as possible'.<sup>8</sup> As a result, a domestic carbon tax or any full-fledged environmental programme was rapidly identified as a 'dud idea': such 'radical measures' had the effect of 'cutting across' the government's objectives: controlling public expenditure and maintaining the international viability of British capital. Indeed, a carbon tax was unfeasible since it would 'unilaterally reduce British competitiveness'.<sup>9</sup> Meanwhile, ambitious action on energy efficiency and renewables would imply too much public spending<sup>10</sup> – from that point, this action was not considered again under Thatcher.

Altogether then, while there was initially broad agreement within the administration for tackling climate change, officials now suggested that only 'smaller ideas' could be 'worth considering' on the domestic fiscal policy side.<sup>11</sup> Some very modest options were discussed in the first half of 1989, such as a sort of narrow carbon tax applying only on electricity sales, to encourage the use of less carbon-intensive fuels, namely gas over coal.<sup>12</sup> This was a tentative reform to the Fossil Fuel Levy, a tax that had already been agreed and was coming into effect with the Electricity Act 1989, and which had the goal to tax electricity sales to finance expensive nuclear power and guarantee its financial viability (and more widely to privatise the electricity sector) (see Helm 2004, Chapter 10). This was first bogged down in a long debate between the enthusiastic Treasury facing obstruction from Cecil Parkinson, then Energy Secretary, who feared its effects on the attractiveness of electricity generators about to be privatised,<sup>13</sup> but the reform really died

down because of the wider problems associated with carbon taxation jeopardised even such modest measures.

In fact, any proposal for such a tax which arrived on officials' desks were now discarded. For instance, the well-known Pearce report (commissioned by Chris Patten, then Environment Secretary), mentioned carbon taxes amongst other possible market instruments to pursue the new concept of 'sustainable development', but the Treasury immediately side-lined those recommendations in October 1989.<sup>14</sup> Officials worried again that carbon taxation would undercut industrial competitiveness<sup>15</sup> as well as clash with the 'priority of lowering inflation'.<sup>16</sup> Finally, a carbon tax would be unlikely to be offset by significant taxation reductions elsewhere, and would thus adversely affect economic growth.<sup>17</sup>

This was not simply a Treasury view, but a general government agreement. As such, Margaret Thatcher gave instructions that the climate issue 'should be tackled only by a coordinated international effort',<sup>18</sup> since to have any effect on the world's climatic conditions, 'any action would have to be at least OECD-wide', and ideally include developing countries and the Soviet bloc.<sup>19</sup> Hence, not even six months after being first discussed, the Prime Minister instructed officials across all government to halt work on a domestic carbon tax,<sup>20</sup> and instead shift to an international approach.

In fact, the administration's established objective was now not to develop substantial domestic solutions, as first imagined, but rather to consider whether the UK should 'initiate or support an international agreement to raise taxes on pollutants' like CO<sub>2</sub>,<sup>21</sup> and 'how the UK should respond to similar proposals from elsewhere'.<sup>22</sup> In other words, the state was now quickly changing gear, transitioning to the management of external political pressures through a shift to the international fora. This started at the May 1989 United Nations General Assembly, where the international community agreed that it would tackle climate change through a global climate convention. There, the UK took the initiative by offering to coordinate the drafting of this convention – while making clear it would not surrender national sovereignty (Boehmer-Christiansen 1995a, pp. 12–13).

### **From international strategies to ad-hoc implementation: economic imperatives and the watering down of climate policy**

These dynamics were also visible in how the UK made sure to resist pressures at the EC's Environment Council throughout 1989 and 1990, where some member states were pushing for a community-wide carbon tax (see Cass 2006). Here, the government aimed to protect its accumulation model and the interests of fossil capital. As soon as June 1989, the governmental position was that carbon taxes would not only affect European Community (EC) members' competitiveness but the UK's competitiveness more particularly –

since it was uniquely dependent on coal for electricity generation (80% of electricity was provided by coal-fired power stations then) compared to other EC members. They would also endanger fossil fuel asset values through the demand-side effects of the policy.<sup>23</sup> Therefore, Thatcher instructed the government's envoy to the Council, Lord Caithness, to pour as much cold water as he could on any proposal for an EC-wide carbon tax.<sup>24</sup>

In late 1989, renewed international pressure pushed the government to create MISC (Miscellaneous) 141, a new ad-hoc Cabinet Subcommittee on climate change. Minutes of a meeting about MISC 141 show the revived tensions at the heart of fossil-fuelled accumulation and politics. Indeed, records show that Margaret Thatcher was 'struck by the enormity of the problem of global warming' – but on the other hand, that she was concerned by the political risk of rumours spreading around carbon taxes, as well as their potential effect on inflation.<sup>25</sup> More crucially perhaps, she was worried by the fact that the Noordwijk summit – a major international climate conference which gathered almost 70 countries in November 1989 (see Cass 2006) – had seen a strong push for the international community to agree to CO<sub>2</sub> emissions stabilisation by 2000 at 1990 levels.<sup>26</sup>

From this point forward, throughout 1990 the British government – alongside countries like the US, Japan and the Soviet Union – would seek to stave off the threat posed by this target, which was becoming the new provisional consensus at the EC and international levels. This would be the main objective of MISC 141 meetings: as opposed to considering any substantial action on the climate, they would consider the impacts of this proposed target on the economy, particularly on the impending privatisation of the energy sector as well as transport policy.<sup>27</sup> Importantly, the administration knew that the climate science consensus was now solidifying around recommendations for significant emissions cuts.<sup>28</sup> The government was also now being seen, and saw itself as, a leader in climate politics, especially as Thatcher's 1988 speech to the Royal Society had now been supplemented to the famous one to the UN in late 1989<sup>29</sup> (see Cass 2006). Despite this, the government's main concern was that achieving stabilisation at 1990 levels by 2000 was unlikely without 'radical action which would impose heavy economic costs' and affect electricity privatisation (amongst other central policies).<sup>30</sup>

In fact, the government saw climate benefits to privatisation, since competition was seen as having the potential to make electricity companies more environmentally friendly, notably by accelerating the dash for gas.<sup>31</sup> However, because of its obligations as part of privatisation proceedings, the government had to state a clear position in its commercial prospectus and then stick to it, which meant no strong changes that may affect the energy sector in the foreseeable future. This was a recurring concern since 1989: any commitment to climate mitigation would negatively affect market conditions

and asset values, as investors would be concerned by the need for electricity companies to radically transform themselves in order to compete in this new environment.<sup>32</sup> In that context, the priority was given to privatisation taking place without any hurdles, and its environmental benefits were abandoned as climate policy was seen as an obstacle to it taking place. Instead, after the government agreed that nothing would be done to jeopardise privatisation, Carolyn Sinclair, an adviser to Thatcher, was left wondering how the administration could perhaps incentivise energy efficiency in the privatised electricity industry.<sup>33</sup>

In this context, the government continued to water down proposals for climate action. For MISC 141, Thatcher signed off on an increasing consideration of carbon markets – then called ‘marketable permits’ and not yet fully explored – and other ‘most cost-effective options for reducing emissions’,<sup>34</sup> while at EC level, it was agreed that there should be a steer away from ideas of carbon taxes and taxation harmonisation while arguing for stabilisation at a later date than 2000, like 2010 or 2005.<sup>35</sup> Work by officials across departments reassured the executive that those targets were more feasible, requiring only a focus on fuel and energy efficiency, possibly complemented by increases in real fuel and energy prices, and some shift away from coal.<sup>36</sup> Rough estimates were that stabilisation by 2005 would cost £25 billion (in 1990 terms) annually, eventually reaching 0.5% of GDP every year, and entail the doubling of energy prices.<sup>37</sup>

Eventually, Thatcher embraced the 2005 target, giving priority to cost avoidance and to the government’s counter-inflationary strategy.<sup>38</sup> 2005 was seen as feasible, and in line with government policy, which was now really to focus on energy efficiency – which as Sinclair pointed out were ‘sensible in their own right’ anyway – and more generally on action that would impose ‘little cost on the economy’.<sup>39</sup> Crucially, the government pushed for the 2005 target and for any climate action at the EC level to be absolutely ‘contingent on a concerted international response’. This was to avoid putting EC countries at a disadvantage by committing themselves ‘to take steps which will impose costs on their economies without some assurance of [actions by others, and therefore] benefits to the global climate’.<sup>40</sup>

Meanwhile, towards late 1990 the wider imperatives of satisfying capital and meeting economic objectives only reasserted themselves as the administration was getting ready to publish a White Paper on the environment. Promised in 1989 to appease criticism coming from the Labour Party and the British public (Cass 2006, pp. 118–9), the provisional White paper was making the limits of climate policy appear again. While the Department of the Environment (DoE) was trying to have at least some new modest measures being passed as policy, the Treasury intervened to resist any demands for new public spending on the basis that the amounts involved would betray ‘the discipline of the public expenditure process’.<sup>41</sup> As Norman

Lamont, the Chief Secretary to the Treasury, had already agreed with Thatcher earlier that year, spending for any environmental initiatives (such as assisting developing countries with rainforest protection) could only come from 'reordering priorities within existing programmes, and not by additions to programmes'.<sup>42</sup> Peter Lilley, the Secretary for Trade and Industry, also intervened against DoE: the Department for Trade and Industry (DTI) were concerned that the government needed to preserve 'business confidence', as industry had voiced concerns about the potential effect of environmental measures on competitiveness and profitability. Rather, the preferred approach would be to play safe, to aim for 'carrying business with us' by encouraging voluntary corporate environmentalism, as opposed to undermining capital-state relations<sup>43</sup> – showing how the more subtle, but less documented forms of influence that capital often has on policymakers (Newell and Paterson 1998, p. 687) unfold.

### **International aid, technological transfer and the Montreal Protocol**

Since early 1989, the administration's effort to avoid the burden of carbon taxes had redirected discussions on other greenhouse gases. These were identified as easier to abate, compared to the 'heavy economic cost' of carbon emissions reduction.<sup>44</sup> In particular, this meant targeting CFCs, in the context of the now well-known Montreal Protocol on the ozone layer, which had been implemented in January 1989 but was still undergoing negotiations to include more developing countries (for a full account, see DeSombre 2000).

As soon as the redirection of the discussion – first internally to the administration, and especially in the international context – had taken place however, the Thatcher government had known that CO<sub>2</sub> emissions would still need to be addressed 'directly', otherwise the government could not 'realistically expect' to achieve the setting up of an international convention on the climate.<sup>45</sup> As a result, the discussions on Montreal paralleled and eventually converged towards the creation of the UNFCCC. Crucially, state managers' reflections on enlarging the Montreal Protocol's membership and improving its effectiveness reveal their overarching concerns for the maintenance of the capitalist (and neoliberal) principles that structure the status quo of the global economy.

As early as January 1989, the government had developed its position on the matter of assistance to developing countries, in particular around transferring technology to help developing countries move away from CFCs by reducing emissions and developing substitutes. The line was to oppose any technology transfer 'on other than a commercial basis', meaning at cost and without state intervention forcing British (and Western) industry's hand. Indeed DTI considered that 'UK industry

cannot be expected to give anything away in terms of prices or transfer of technology on other than commercial terms'.<sup>46</sup> Technology transfer would only happen if the above was guaranteed, as well as if the recipient country provided adequate intellectual property rights protection, and a 'liberal climate for trade and investment'. Finally, the administration also refused to consider patent waiving and question the established principles of patent law, and considered that patent buyouts and patent licensing were 'a commercial matter for the parties concerned'.<sup>47</sup>

The contradictions of environmental policy appeared again, as officials felt they should 'not close the door' on technology transfer and technical assistance playing a role in encouraging developing countries to fully join action on CFCs, while reasserting that the 'possibilities [for this to happen] should be guarded'. Indeed any transfer that happened outside of the parameters set out above could have 'wider implications' for competition and market discipline, which was considered as highly undesirable.<sup>48</sup> Thus, this was why developing countries' demands for 'more favourable consideration of their development needs' were actively 'being resisted' by Western countries, as they would damage the interests of, for example, the pharmaceutical and chemical industries.<sup>49</sup> Some in the administration, like Nicholas Ridley, the Secretary of State for Environment, wished for more ambitious action.<sup>50</sup> Ultimately though, Ridley worried of damaging firms' interests, and more widely of removing the 'motivation' of competition and profit-making, which were seen as driving innovation on CFCs substitutes – and thus swiftly aligned with others.<sup>51</sup>

At the Protocol's negotiations, these issues coalesced in the form of the funding mechanism (the Multilateral Fund), and of the serious precedent this would set. Indeed agreeing to financially assist developing countries for CFCs would open the door to similar funding in future international environmental agreements. The UK, and most Western countries, had vehemently opposed the idea of setting up the Multilateral Fund for this reason, although in the end they had to concede to developing countries and set up the Fund, setting the feared precedent (see DeSombre 2000).

Shortly after, the Thatcher government responded internally by considering its wider position on a future 'international climate fund' – one that would be negotiated under the auspices of the future UNFCCC. Indeed, towards 1989–1990, the international community rapidly agreed that an international climate convention would be negotiated and signed in 1992, in time for the UN Conference on the Environment and Development. Against this background, an FCO official bluntly spelled out two overarching questions which needed addressing:

- (i) is the West willing to commit itself to additional aid to bring the Third World on board?
- (ii) can the West resist the demands of the Third World for a change in the world intellectual property regime to permit freer technology transfer to assist responses to climate change?<sup>52</sup>

The government's position here was clear: 'the notion that developed countries should make financial amends to developing countries for past environmental pollution is not acceptable'. Instead, targeted aid programmes and commercial investment – which, conveniently, would knowingly provide new accumulation outlets for British capital abroad – were the way forward in North-South relations.<sup>53</sup>

Archival documents provide a fascinating look into the honesty with which this stance was formulated: the government was entirely aware that the West's carbon-intensive industrialisation had 'reduced development options' for developing countries. *And still*, the idea of a 'international climate fund' had to be resisted. The priority would be given to the UK's 'public expenditure priorities', and the government would only move in lockstep with other developed countries.<sup>54</sup> Crucially, the UK and other Western countries would focus on local, targeted help via bilateral relations (such as through British forestry initiatives) to actively try and 'fend off' developing countries' demands. Indeed, as an FCO official stressed, this

should minimise the risk of prompting the developing countries to press for compensation for the consequences of past pollution caused by the developed countries. ... the advocates of compensation are seeking agreement to a retrospective version of the 'polluter pays' principle. Acceptance of their case would have wide ranging and unwelcome implications.<sup>55</sup>

This position was not only largely shared amongst developed countries, but it also benefitted from special consideration as the UK oversaw coordination of the drafting of the future UNFCCC. This was clearly visible one year later, as British officials reviewed the draft text of the future convention towards the end of the negotiations process. Aided by Western allies, the UK successfully eliminated any paragraphs that either a) opened the door to the logic of financial assistance, or even worse, retrospective compensation or discussions of terms of trade; b) set direct emissions stabilisation or reductions targets, or c) mentioned any technology transfer on non-commercial terms.<sup>56</sup> Hence, the final UNFCCC text was hollowed out entirely from any language that could give developing countries leverage to obtain substantial financial or technological assistance (see UNFCCC 1992).



## Conclusion

In this article, I have contributed to the green state literature at three levels: theoretical, methodological and empirical. I responded to the literature's recent focus on the obstacles and prospects of green transitions to answer Alami et al. (2023) call by showing *how* the insuperable barrier to ambitious environmental policies plays out in day-to-day governance. By presenting a policymakers-focused framework and the first archival case study of the early formulation of British climate policy, I showed how a shift to the international realm and resistance to Global South countries' demands originated in state managers' concerns with cardinal economic objectives, from inflation control to public spending restraint and national competitiveness, which puts them in a constant bind. As they face this wide array of economic priorities and wider paradigmatic logics, state managers confront those in variegated ways but still end up 'beneath the insuperable barrier'. I thus showed that state managers are situated at the intersection of the contradictory pressures of accumulation, hampering their ability to deal with the climate and environmental crises.

Nevertheless, as Haas (2021) and Paterson (2016) note, even those espousing the view that the capitalist state's response to climate change is largely determined by its commitment to accumulation may remain of the opinion that flawed environmental policies open up significant space for contestation and ultimately transformation, as suggested by some EM scholars involved in the green state debate. This is ultimately dependent on scholars' views on how to transcend the 'insuperable barrier'. Indeed, some – in both EM and Marxist literatures – locate sources of change with social movements, whom they see as potentially able to impose ecological objectives, for instance by making the state prioritise the legitimisation imperative over accumulation (for example, Dryzek et al. 2003, pp. 13–14), or by forcing the state to take on fossil capital via relentless pressure from a radical flank (Malm 2021). From a class/production focus, Huber (2022) rather emphasises the need for coalitions of social movements and trade unions to push capital to decarbonise production (Huber 2022), while Heron and Dean (2022) emphasise party-building and internationalism. Ultimately though, when it comes to governmental action, tackling the root causes of the issue means severing the link between the state and capitalism's accumulation imperative – only then can the state be truly greened.

## Notes

1. TNA (The National Archives) CAB 164/1868/2, Wicks to Bright, 01/12/1988.
2. for example, Odling-Smee to Price, 02/11/1989, 2.
3. CAB 164/1868/1, Wilson to Turnbull, 22/12/1988, 1–3.

4. CAB 164/1868/1, Wilson to Turnbull, 22/12/1988, Annex I, 1.
5. T 628/188, Williams to Culpin, 06/01/1989, 3–4.
6. CAB 164/1868/1, Wilson to Turnbull, 22/12/1988, Annex C.
7. T 628/188, Edwards to Brooke, 11/06/1989, 2.
8. T 628/188, Wood to Edwards, 01/02/1989, 4.
9. PREM 19/2656, Morris to Thatcher, 18/05/1989, 2.
10. T 628/191, Williams to Wood, 14/04/1989, 1.
11. T 628/188, Edwards to Brooke, 11/01/1989, 6.
12. CAB 164/1922/1, Lamont to Parkinson, 27/02/1989, 1.
13. CAB 164/1922/1, Lamont to Parkinson, 27/02/1989; T 628/192, Williams to Brooke, 25/04/1989.
14. PREM 19/2657, Lawson to Patten, 06/10/1989.
15. T 628/191, Williams to Edwards, 13/04/1989, 2; T 628/192, Ford to Culpin, 18/04/1989, 2.
16. T 628/205, Chapman to Hartley, 12/11/1989.
17. T 628/205, Evans to Dodds, 14/11/1989, 2.
18. T 628/191, Williams to Lawson, 13/04/1989, 2.
19. T 628/192, Culpin to Lawson, 20/04/1989, 2.
20. PREM 19/2656, Thatcher to Morris, 18/05/1989, 3.
21. T 628/192, Culpin to Lawson, 20/04/1989, 2.
22. T 628/191, Williams to Lawson, 13/04/1989, 2.
23. T 628/193, Spivey to Sanders, 01/06/1989, 1.
24. T 628/194, Powell to Bright, 7/06/1989.
25. PREM 19/2965, Slocock to Bright, 06/12/1989, 1.
26. PREM 19/2965, Slocock to Bright, 06/12/1989, 2.
27. PREM 19/2965, Slocock to Thatcher, 31/01/1990, 1.
28. PREM 19/2965, Wilson to Thatcher, 31/01/1990, 2–3
29. PREM 19/2965, Patten to Thatcher, 31/01/1990, 1.
30. PREM 19/2965, Wilson to Thatcher, 31/01/1990, 1.
31. CAB 164/1922/2, Morris to Bright, 13/01/1989, 2–3
32. PREM 19/2965, Wakeham to Thatcher, 30/01/1990, 2.
33. PREM 19/2965, Sinclair to Thatcher, 26/01/1990.
34. PREM 19/2967, Wallace to Gray, 6/04/1990.
35. PREM 19/2965, Wilson to Thatcher, 31/01/1990, 1–5.
36. PREM 19/2965, Wilson to Thatcher, 02/03/1990.
37. PREM 19/2967, Wallace to Gray, 6/04/1990, 2.
38. PREM 19/2967, Tray to Gieve, 05/04/1990; PREM 19/2969, Major to Thatcher, 24/07/1990, 1.
39. FCO 30/8559, Arthur to Waldegrave, 29/05/1990, 1.
40. FCO 30/8559, Bostock to Osborn, 24/05/1990, 1–2
41. PREM 19/2969, Potter to Thatcher, 25/07/1990, 2.
42. PREM 19/2966, Lamont to Thatcher, 20/02/1990.
43. FCO 30/8561, Lilley to Patten, 25/10/1990, 1–2.
44. T 628/191, Bush to Wells, 14/04/1989, 1–2.
45. T 628/191, Bush to Wells, 14/04/1989, 1–2.
46. CAB 164/1922/2, Hobson to Mogg, 18/01/1989, 4.
47. CAB 164/1922/2, Hobson to Mogg, 18/01/1989, 4–5
48. CAB 164/1922/2, Hobson to Mogg, 18/01/1989, 5; PREM 19/2653, Ridley to Howe, 21/02/1989, 1.
49. CAB 164/1922/2, Hobson to Mogg, 18/01/1989, 5.

50. PREM 19/2653, Ridley to Howe, 21/02/1989.
51. PREM 19/2654, Young to Ridley, 28/02/1989.
52. FCO 30/8560, Brenton to Waldegrave, 18/06/1990, 2.
53. PREM 19/2657, Bright to Powell, 30/06/1989, 6–7.
54. PREM 19/2657, Hope to Powell, 18/08/1989, 1–2.
55. PREM 19/2657, Hope to Powell, 18/08/1989, 6.
56. T 511/86, Morris to Brown, 19/11/1991, 1–15.

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## References

- Alami, I., *et al.* 2022. Special issue introduction: what is the new state capitalism? *Contemporary Politics*, 28 (3), 245–263. doi:[10.1080/13569775.2021.2022336](https://doi.org/10.1080/13569775.2021.2022336)
- Alami, I., Copley, J., and Moraitis, A., 2023. The ‘wicked trinity’ of late capitalism: governing in an era of stagnation, surplus humanity, and environmental breakdown. *Geoforum; Journal of Physical, Human, and Regional Geosciences*. Online first. 103691. doi:[10.1016/j.geoforum.2023.103691](https://doi.org/10.1016/j.geoforum.2023.103691)
- Bäckstrand, K. and Kronsell, A., 2015. *Rethinking the green state: environmental governance towards climate and sustainability transitions*. London: Routledge.
- Bailey, D., 2020. Re-thinking the fiscal and monetary political economy of the green state. *New Political Economy*, 25 (1), 5–17. doi:[10.1080/13563467.2018.1526267](https://doi.org/10.1080/13563467.2018.1526267)
- Barker, C., 1978. A note on the theory of capitalist states. *Capital & Class*, 2 (1), 118–126. doi:[10.1177/030981687800400108](https://doi.org/10.1177/030981687800400108)
- Barry, J. and Eckersley, R., 2005. W(h)ither the green state? In: J. Barry and R. Eckersley, eds. *The state and the ecological crisis*. Cambridge, MA: MIT Press, 255–272.

- Block, F., 1977. The ruling class does not rule: notes on the Marxist theory of the state. *Socialist Revolution*, 33, 6–28.
- Block, F., 1980. Beyond relative autonomy: state managers as historical subjects. *Socialist Register*, 17 (17), 227–241.
- Boehmer-Christiansen, S.A., 1995a. Britain and the international panel on climate change: the impacts of scientific advice on global warming part 1: integrated policy analysis and the global dimension. *Environmental Politics*, 4 (1), 1–18. doi:[10.1080/09644019508414180](https://doi.org/10.1080/09644019508414180)
- Burnham, P., 2001. New labour and the politics of depoliticisation. *The British Journal of Politics and International Relations*, 3 (2), 127–149. doi:[10.1111/1467-856X.00054](https://doi.org/10.1111/1467-856X.00054)
- Burnham, P., et al. 2008. *Research methods in politics*. Basingstoke: Palgrave Macmillan.
- Cass, L.R., 2006. *The failures of American and European climate policy*. Albany: SUNY Press.
- Christoff, P., 1996. Ecological modernisation, ecological modernities. *Environmental Politics*, 5 (3), 476–500. doi:[10.1080/09644019608414283](https://doi.org/10.1080/09644019608414283)
- Clarke, S., 1988. *Keynesianism, monetarism and the crisis of the state*. Aldershot: Elgar.
- Copley, J. and Moraitis, A., 2021. Beyond the mutual constitution of states and markets: on the governance of alienation. *New Political Economy*, 26 (3), 490–508. doi:[10.1080/13563467.2020.1766430](https://doi.org/10.1080/13563467.2020.1766430)
- Craig, M.P.A., 2020. ‘Treasury control’ and the British environmental state: the political economy of green development strategy in UK central government. *New Political Economy*, 25 (1), 30–45. doi:[10.1080/13563467.2018.1526269](https://doi.org/10.1080/13563467.2018.1526269)
- Davidson, S., 2012. The insuperable imperative: a critique of the ecologically modernizing state. *Capitalism Nature Socialism*, 23 (2), 31–50. doi:[10.1080/10455752.2012.674147](https://doi.org/10.1080/10455752.2012.674147)
- Death, C., 2016. *The green state in Africa*. New Haven: Yale University Press.
- Death, C. and Tobin, P., 2017. Green states and global environmental politics: beyond western IR? In: O. Corry and H. Stevenson, eds. *Traditions and trends in global environmental politics: international relations and the earth*. London: Routledge, 63–80.
- DeSombre, E.R., 2000. The experience of the Montreal Protocol: particularly remarkable, and remarkably particular. *UCLA Journal of Environmental Law and Policy*, 19 (1), 49–82. doi:[10.5070/L5191019217](https://doi.org/10.5070/L5191019217)
- Dryzek, J.S., et al. 2003. *Green states and social movements: environmentalism in the United States, United Kingdom, Germany, and Norway*. Oxford: Oxford University Press.
- Eckersley, R., 2004. *The green state: rethinking democracy and sovereignty*. Cambridge: MIT Press.
- Eckersley, R., 2021. Greening states and societies: from transitions to great transformations. *Environmental Politics*, 30 (1–2), 245–265. doi:[10.1080/09644016.2020.1810890](https://doi.org/10.1080/09644016.2020.1810890)
- Gamble, A., 1988. *The free economy and the strong state: the politics of thatcherism*. Basingstoke: Macmillan.
- Haas, T., 2021. From green energy to the green car state? The political economy of ecological modernisation in Germany. *New Political Economy*, 26 (4), 660–673. doi:[10.1080/13563467.2020.1816949](https://doi.org/10.1080/13563467.2020.1816949)

- Hatzisavvidou, S., 2020. Inventing the environmental state: neoliberal common sense and the limits to transformation. *Environmental Politics*, 29 (1), 96–114. doi:[10.1080/09644016.2019.1684732](https://doi.org/10.1080/09644016.2019.1684732)
- Hausknost, D., 2020. The environmental state and the glass ceiling of transformation. *Environmental Politics*, 29 (1), 17–37. doi:[10.1080/09644016.2019.1680062](https://doi.org/10.1080/09644016.2019.1680062)
- Hausknost, D. and Hammond, M., 2020. Beyond the environmental state? The political prospects of a sustainability transformation. *Environmental Politics*, 29 (1), 1–16. doi:[10.1080/09644016.2020.1686204](https://doi.org/10.1080/09644016.2020.1686204)
- Helm, D., 2004. *Energy, the state, and the market: British energy policy since 1979*. Oxford: Oxford University Press.
- Heron, K., 2024. Forget eco-modernism. *Verso Blog*, April.
- Heron, K. and Dean, J., 2022. Climate Leninism and revolutionary transition: organisation and anti-imperialism in catastrophic times. *Spectre*, June.
- Holloway, J. and Picciotto, S., 1977. Capital, crisis and the state. *Capital & Class*, 1 (2), 76–101. doi:[10.1177/030981687700200104](https://doi.org/10.1177/030981687700200104)
- Huber, M.T., 2022. *Climate change as class war: building socialism on a warming planet*. London: Verso Books.
- Hysing, E., 2015. Lost in transition?: the green state in governance for sustainable development. In: K. Bäckstrand and A. Kronsell, eds. *Rethinking the green state: environmental governance towards climate and sustainability transitions*. London: Routledge, 27–42.
- Jackson, J. and Bailey, D., 2023. ‘Facilitating the transition to net zero’ and institutional change in the Bank of England: perceptions of the environmental mandate and its policy implications within the British state. *The British Journal of Politics and International Relations*, 26 (2), 343–360. Online First. doi:[10.1177/13691481231189382](https://doi.org/10.1177/13691481231189382)
- Jaspal, R. and Nerlich, B., 2014. When climate science became climate politics: British media representations of climate change in 1988. *Public Understanding of Science*, 23 (2), 122–141. doi:[10.1177/0963662512440219](https://doi.org/10.1177/0963662512440219)
- Kavanagh, D., 1991. Why political science needs history. *Political Studies*, 39 (3), 479–495. doi:[10.1111/j.1467-9248.1991.tb01624.x](https://doi.org/10.1111/j.1467-9248.1991.tb01624.x)
- Malm, A., 2016. *Fossil capital: the rise of steam power and the roots of global warming*. London: Verso Books.
- Malm, A., 2020. *Corona, climate, chronic emergency: war communism in the twenty-first century*. London: Verso Books.
- Malm, A., 2021. *How to blow up a pipeline: learning to fight in a world on fire*. London: Verso Books.
- Mol, A.P., 2002. Ecological modernization and the global economy. *Global Environmental Politics*, 2 (2), 92–115. doi:[10.1162/15263800260047844](https://doi.org/10.1162/15263800260047844)
- Mol, A.P. and Spaargaren, G., 2000. Ecological modernisation theory in debate: a review. *Environmental Politics*, 9 (1), 17–49. doi:[10.1080/09644010008414511](https://doi.org/10.1080/09644010008414511)
- Moore, J.W., 2016. *Anthropocene or capitalocene?: nature, history, and the crisis of capitalism*. Binghamton: PM Press.
- Newell, P. and Paterson, M., 1998. A climate for business: global warming, the state and capital. *Review of International Political Economy*, 5 (4), 679–703. doi:[10.1080/096922998347426](https://doi.org/10.1080/096922998347426)
- Oshitani, S., 2006. *Global warming policy in Japan and Britain*. Manchester: Manchester University Press.

- Paterson, M., 2016. Political economy of the greening of the state. In: T. Gabrielson, C. Hall, J.M. Meyer, and D. Schlosberg, eds. *The Oxford handbook of environmental political theory*. Oxford: Oxford University Press, 475–490.
- Schnaiberg, A., Pellow, D.N., and Weinberg, A., 2002. The treadmill of production and the environmental state. In: A.P.J. Mol and F.H. Buttel, eds. *The environmental state under pressure*. Bingley: Emerald Publishing, 15–32.
- UNFCCC, 1992. *United Nations Framework Convention on Climate Change*. United Nations, FCCC/INFORMAL/84 GE.05-62220 (E) 200705, Secretariat. Bonn, Germany: United Nations Framework Convention on Climate Change.