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‘Treasury Control’ and the British Environmental State.

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Introduction

There has been a resurgence of interest in 'the state' amongst researchers of environmental politics. A growing literature charts, compares and typologises a new aspect of the modern capitalist state – the so-called 'environmental state' – said to have emerged as it has acquired new roles and institutional capacities in relation to the environment and the unfolding ecological crisis (Duit, Feindt and Meadowcroft, 2016). In this perspective, the environmental state sits alongside previous sets of functions cumulatively acquired by the modern capitalist state, including (in roughly chronological order) 'the security state', 'the developmental state' and 'the welfare state' (on which see Meadowcroft, 2012). In this respect, it represents the intersection of the capitalist state's economic and environmental functions and policies, and the practical expression of state managers' attempts to reconcile the goals of capital accumulation and the mitigation of environmental degradation.

The environmental state literature highlights the continuing relevance of an established set of research interests that have been subject to relative neglect by researchers of environmental politics in recent years: the application of state power in domestic affairs for public purposes, and the factors that shape whether and how it is so applied. Yet, despite the concept's potential as a tool with which to explicate the domestic environmental politics of individual countries, much of the literature on the environmental state emphasises comparisons and generalisations, with researchers devoting their efforts to constructing ideal-typical typologies of different kinds of environmental state (for instance Duit, 2016; Sommerer and Lim, 2016; Christof, 2005). In this paper I adopt a different tack, examining the emergence of the British environmental state in its unique historical and political-economic context in order to account for some of the barriers that are shaping and obstructing its development.

My argument concerns the impact of the way that British state is itself organised, and the relationship between this and the broader financialised model of capital accumulation in which the British state is situated. These factors have served to concentrate a great amount of direct and indirect decision making and agenda-setting powers into a single government department – H.M. Treasury. These powers add up to a tendential predominance in matters of policy formation in and beyond economic policy. This predominance is known colloquially among British officials as 'Treasury control' (Haddon, 2014).

Moreover, the same factors have reinforced a set of historically enduring policy priorities on the part of the Treasury – priorities that are antithetical to the emergence of a substantive environmental state in Britain and the transformation of the country's model of capital accumulation into a less environmentally destructive form. Historically speaking, at times of economic crisis the Treasury demonstrates a marked hostility to the kinds of interventionist and production-oriented industrial policies that an environmental state implies (Ingham, 1984). During such moments, it has exercised control over nascent initiatives of this nature by other government departments, sacrificing them to the goal of repairing (with as few adaptations as possible) the country's finance-dominated accumulation model. The pattern is witnessed in the post-2008 context, as it has been throughout the peacetime politics of the 20th century. The twofold result is that commercial financial capital continues to be privileged in the exercise of state power in Britain and remains predominant in the country's accumulation model, whilst the British capitalist state fails to develop the kinds of institutional capacities through which it might transform this accumulation model into a 'greener' form.[1]

For this reason, my overarching contention is that a better understanding of the role, mechanisms and directing factors of Treasury control is not merely an interesting historical puzzle, but a vital strategic objective for those who advocate a greener model of capital accumulation in the British context. In the first two sections I lay out the academic and historical context for my argument, situating it among literatures on the environmental state, industrial strategy and British political economy. In the third section I lay out the principal evidence for my claim that Treasury control is negatively impacting upon the development of a substantive environmental state in Britain, a trend that I argue can be expected to continue for as long as the Treasury remains unreformed. In the concluding section I offer some provisional reflections on the debate over 'what is to be done' in the light of these discussions.

1. The (Capitalist) Environmental State and 'Green Industrial Strategy'

The emergence of the environmental state as an analytical concept has occurred admidst a broader rediscovery of state power among researchers of environmental politics. This growing interest in the potential of the modern state as a force for ecological crisis resolution is likely to have been reinforced by the diminishing timescales within which expansive problems like global warming and biodiversity loss must be addressed, the abject failure of experiments in market environmentalism, and the uncertain impact of 'transnational climate change governance' on environmental outcomes. Yet a somewhat unfortunate result of this overdue turn (at least from the point of view of the non-specialist approaching these literatures) has been an array of similar-sounding but only partially overlapping conceptual adjectives appended to the concept of 'the state'. Among them are the green state (an increasingly refined normative ideal prescribing the form a state might take in in a truly ecologically sustainable social model (on which see Eckersley, 2004 and Bailey, 2016) and the environmental state (an analytical category intended to describe how modern states are changing as a result of the acquisition of environmental responsibilities and functions).

These developments in the field of environmental politics have occurred in parallel to a similar rediscovery of state power among economists and policymakers. Industrial policy (defined here as *purposefully* coordinated policy interventions aimed at shaping the trajectory of economic development in pursuit of public purposes) is once more on the mainstream policy agenda after decades of neglect (Rodrik, 2010; Wade, 2012; Craig, 2015; Berry, 2016). This rediscovery of industrial policy also reflects the failure of market-led development to deliver acceptable outcomes in an acceptable timeframe. However, the imperative driving this turn is rather different to that motivating scholars of environmental politics. It reflects the need of states to re-establish stable models of capital accumulation that are able to deliver publicly acceptable rates of income and employment in the staid economic circumstances of the post-2008 context.[2]

This latter consideration serves to underline an important point: the environmental state has not emerged in a historical vacuum. It has developed in the context of pre-existing functions acquired by modern states. And, in all but a few outlying cases, modern states are *capitalist* states: they are enmeshed in, and dependent in multiple ways upon, a model of capital accumulation in their jurisdiction, which their personnel attempt to administer through the various practices comprising public policy. This imperative to administer a model of capital accumulation arises because societies hosting capitalist political economies are dependent for income upon successful capital accumulation, whether it be directly (through individual participation in capitalist labour, product or asset markets) or indirectly (through public redistribution of private profits and incomes).

Viewed thus, the environmental state marks the intersection of the modern capitalist state's existing economic and social responsibilities, functions and policies with its more recently acquired environmental ones: it is the site upon which trade-offs and/or synergies between them are fashioned. The tension necessitating these synergies and/or trade-offs arises because those accumulation models able to support the capitalist state's need for publicly acceptable levels of income and employment have entailed economic growth, and such growth remains 'coupled' to a range of growing ecological impacts (Craig, forthcoming 2016). True, certain countries can demonstrate improvements in certain ecological impacts of their aggregate domestic production. However, this has often been accounted for simply by importing those products associated with ecological degradation from other countries. In this sense, their accumulation models are no less dependent upon (or implicated in) ecologically degrading production. Consequently, a *capitalist environmental state* is one that – amongst other things – is orientated to the transformation of the productive sectors within its jurisdiction so that their direct and indirect ecological impacts are progressively reduced even as growth continues.

The attempts to build synergies and minimise trade-offs between economic and environmental policy goals presupposes industrial policy. More specifically, it presupposes a 'green industrial strategy', which we might define as purposefully coordinated state interventions in the productive economy intended to yield improvements in the ecological performance of a country's accumulation model. The degree to which a given state practises green industrial strategy, and the nature of that strategy, are thus important quantitative and qualitative indicators of the extent to which it is an environmental state.

2. The British Post-2008 Context

A variety of quite distinct accumulation models have prevailed in Britain over the course of the past century and a half, but with the exception of certain historically anomalous moments (namely, during the two world wars) they have had an important commonality: commercial finance capital has been the lead sector and has been systematically privileged in the exercise of state power (Ingham, 1984). Meanwhile, domestic industrial capital (that is, capital invested in the production of goods and services in the domestic economy, rather than the trading of existing assets or in foreign investments) has seen relatively less state power exercised on its behalf.

The paucity of industrial policy in relation to productive sectors is one of a number of factors frequently invoked to explain Britain's relative manufacturing underperformance in comparison with other advanced capitalist economies over the 20th century (Berry, 2015). By contrast, at times of economic crisis the British state has routinely adopted economic policy positions that have reinforced the centrality of commercial financial businesses to its accumulation model. Historically, this has most commonly taken the form of policies to maintain exchange rate commitments (the gold standard, and then the Bretton Woods system) through domestic deflation. Thus, insofar as a 'developmental state' has taken shape in Britain, it has been one predominantly oriented to creating and defending the conditions for the prosperity of the City of London, rather than supporting the development and modernisation of the productive economy. At times of economic crisis, the latter goal has been subordinated to the former.

Following Britain's disorderly exit from the European Exchange Rate Mechanism in 1992 a series of contingent developments combined to facilitate the emergence of a new accumulation model, which my SPERI colleagues have termed the 'Anglo-liberal growth model' (Hay, 2011; see Craig 2015 for a review). Like its predecessors, it is one with commercial financial capital at its core, but it also has a number of features which make it distinct from its predecessors. First, growth is powered by domestic demand driven by credit rather than earned income (ironically summed up as 'house price Keynesianism' by Watson (2010) in reference to the significant role played by home equity release in bolstering aggregate demand). This offset an otherwise generally stagnating picture of real wage growth. Secondly, prior to 2008 regional disparities in employment arising from a rapid pace of manufacturing decline were offset to an extent by public sector expansion, in part facilitated by tax receipts from the profitable financial sector. Third, the financial business strategies that underpinned the previously mentioned drivers of growth and employment channelled capital into residential and commercial property lending in a bid to meet demands for shareholder value, and were increasingly centred upon the generation of transaction fees, rather than holding assets to maturity (Engelen *et al.*, 2012). The result played no small part in the international build-up of systemic risk that gave rise to the global financial crash of 2008.

The reliance of British growth upon expanding household credit, consumer indebtedness and financial sector profitability left Britain particularly exposed to the financial storm of 2008. In the intervening years a concerted attempt has been made by governments to repair the pre-2008 accumulation model with as few adaptations as possible. They have done so firstly by attempting to shore up the conditions that gave rise to the credit-driven expansion of demand prior to 2008, doing so through policies to preserve asset prices and encourage consumer lending. These have included a suite of unconventional monetary policies and housing market interventions, including 'quantitative easing', 'credit easing' and the 'help to buy' scheme. Second, they have done little to stem the wage-deflationary adjustment which followed the financial crisis, and have arguably stoked it through the constraint of government spending and reforms to the labour market and social security. The shifting of the burden of adjustment away from the asset-rich onto those reliant upon wage income, transfer payments and public services has earned the strategy the name of 'recovery through regressive redistribution' (Green and Lavery, 2015). Support to industry, meanwhile, has been a persistent target for fiscal consolidation (Craig, 2015 – on which more shortly).

Between 2013 and the 2016 EU referendum result British politicians had taken to speaking about the economy as though recovery had been achieved and the status quo restored. In reality, the British economy remained in anything but a normal or politically sustainable state. Interest rates remained at the historically low 0.5%, unorthodox monetary instruments continued to be deployed, a reduction in real wages of historical proportions was curtailed only by the crash in oil prices in 2014, and major public services entered a period of financial collapse. In many senses, the apparent resumption of crisis in the wake of the EU referendum is better considered as a new phase in a prolonged crisis conjuncture, rather than a distinct crisis moment: it is far from clear that the dissatisfaction felt by the electorate with existing institutional arrangements can be separated from these broader issues. This is not the place to disentangle these factors; however, it is upon this basis that I refer to the post-2008 context as an ongoing period of political-economic crisis.

Post-2008 macroeconomic policy parallels the macroeconomic stances historically executed by British governments at times of crisis: the recovery strategy privileges the profitability of commercial financial businesses and reinforces their centrality to the accumulation model. It does so by supporting asset prices whilst undermining the public financial basis on which a project of state-facilitated accumulation model transformation would depend. In this respect post-2008 macroeconomic strategy is about accumulation model *repair,* rather than *transformation*.

One is obliged to ask why this historical regularity persists. There are essentially two perspectives on this issue. One emphasises the direct power and influence of the financial sector in influencing government policy, through (among other examples) lobbying, the penetration of financial sector insiders into policymaking institutions, or shared membership of informal networks (the so-called 'old boys network'). Another emphasises 'structural power', referring to the opportunities and constraints that commercial financial businesses collectively pose for powerful organisations within the British state to achieve their mandated objectives. In the latter perspective, the centrality of the financial sector in British accumulation strategies tends to be self-reinforcing because administering the prevailing accumulation model (and, if necessary, repairing it) can appear less financially and politically costly from the perspective of policymakers than a project to transform it.

There are likely to be elements of truth in both of these perspectives when applied to the post-2008 context (see, for instance, Engelen *et al.*, 2012); however, it is the latter structural perspective that is my focus here. Such a perspective underpins the work of Geoffrey Ingham (1984), who offers a richly historicised interpretation of the tendency of the British state to privilege commercial financial businesses at times of economic crisis, and the concomitant under-development of British industrial policy. For Ingham, the roots of the persistent financialisation of Britain's accumulation strategies lie in a mutually reinforcing relationship between the policy priorities of the Treasury and the Bank of England on the one hand, and the interests of commercial financial businesses on the other. He argues this relationship, which he terms 'the City-Bank-Treasury nexus', to be a necessary condition in explaining the crisis responses of British governments over the course of the 20th century, despite the greatly varying economic and political circumstances that have characterised each individual crisis moment.

Between them, the Treasury and Bank of England hold an effective monopoly on macroeconomic policymaking in Britain, possessing the sum of fiscal, tax, monetary, credit and budgetary policy-making powers. It is from these institutions that the core policies comprising recovery through regressive redistribution emanate. The question therefore becomes how and why these institutions would set macroeconomic policy in such a way as to reinforce the predominance of financial capital in successive British accumulation strategies.

3: 'Treasury Control'

Addressing this question requires us to shift our focus down a level, away from the common but misplaced tendency to speak of the motives of 'governments' in the singular and to instead adopt a perspective that captures the different (and often competing) mandates, strategies and ways of thinking that are held by personnel within different government departments and agencies. It has been said that British governments have parallels with mediaeval baronies: different ministries hold a high degree of operational autonomy from one another, whilst the head of government (the prime minister) has only a sparse and often blunt set of coordinating institutions through which to impose their will (Wilkes and Westlake, 2014; Corry, 2011). Yet, it is also true that not all departments are equally endowed. The direct and indirect power and influence of the Treasury (the focus of the present paper) pervades government, giving rise, as mentioned earlier, to the notion of 'Treasury control'.

Treasury control holds the potential to be a rather useful analytical concept if we are careful to be clear about what we mean when we use it. Throughout this paper, I use the term to signify ongoing attempts by Treasury personnel to construct, maintain and defend a privileged position of power vis-à-vis other government departments so as to ensure the realisation of Treasury policy priorities. There are many institutional mechanisms through which Treasury control manifests itself in practice, but most are related to the Treasury's monopoly over budgetary and tax policy in non-devolved areas and its oversight of departmental spending plans. These give it an unparalleled ability to monitor, constrain and bargain over the spending priorities of other departments.

Perhaps the most encompassing form of power that the Treasury possesses is its direct control over the financial resources available to each department, arising from its role in setting tax, borrowing and budgetary policy. In the spending review the Chancellor caps the financial resources that each minister will have to pursue their policy brief over the spending review period, and determines what additional resources will be available at each biannual budget. Beyond this, Treasury spending teams in each department monitor, and are required to sign off on, significant departmental spending projects. The Treasury-authored *Green Book* stipulates the terms according to which cost-benefit analyses must be conducted by public sector bodies when assessing spending projects. The Chief Secretary to the Treasury attends all cabinet committees (the nominal sites of cross-departmental projects and decision-making) with a brief to assert Treasury priorities and oppose projects judged likely to become resource intensive (Corry, 2011). This list is far from exhaustive, but suffices to demonstrate that the influence of the Treasury extends far beyond its immediate departmental remit of macroeconomic policy.

Despite its considerable power vis-à-vis other departments, Treasury control should not be regarded as an invariant aspect of British politics (Thain, 1984). On the contrary, Treasury control has been *accomplished and defended* by Treasury personnel in the face of a broader and continually changing set of political and economic circumstances. These circumstances have often conspired to challenge and reduce Treasury control by bolstering the ability of forces within and beyond the state to resist Treasury policy priorities. Challenges have come in the form of reforming prime ministers proposing to curtail the Treasury's remit and hive off its roles to other departments; a trade union movement that has at times succeeded in resisting macroeconomic policy decisions (particularly throughout the 1970s); and, not least, the need of all politicians (Chancellors included) to factor the priorities of the electorate into their decision-making. In this respect Treasury control has ebbed and flowed over the course of the past century and a half, and the processes by which it has been maintained have been contingent rather than inevitable. Yet the Treasury has proven adept at navigating these challenges and asserting control, particularly at moments of economic crisis. From a low point in the post-war period, where failed attempts were made to side-line the Treasury in favour of a new economics ministry focused on industrial growth and modernisation, the Treasury has gradually consolidated a high level influence over economic and social policy (Davis and Walsh 2015).

Ingham's argument is that the Treasury has a set of enduring policy preferences that underpin its quest for control. We might refer to this corollary of Treasury control as 'the Treasury view'. Along with those of the Bank, these preferences repeatedly prove conducive to the ongoing dominance of the commercial financial sector and hostile to projects of accumulation model transformation.

It is perhaps most accurate to think of the Treasury view as an enduring set of themes, rather than an unchanging or monolithic body of thought and associated policy: it is demonstrably the case that shifting economic orthodoxy has impacted on the design of policies emanating from the Treasury, and the historical literature suggests that debates take place among Treasury personnel (see Thain, 1984 for a discussion of the post-war period which highlights this). Yet, when comparing documents published by the Treasury in recent years to the arguments and purposes of the Ricardian liberal reformers of the mid-19th century (to whom Ingham attributes the instigation of the project of Treasury control), one is struck by just how small the degree of development has been (cf. Ingham, 1984 and Macpherson, 2014). An abstraction of these themes might go thus: (1) a scepticism regarding the ability of targeted public investment to achieve positive economic effects, leading to a generally uncritical attitude towards market allocations of economic resources; (2) a scepticism of the ability of broader government to control spending, leading to a preoccupation with cost management, and (3) a preoccupation with a relatively narrow range of macroeconomic indicators and their assumed relationships, leading to an emphasis on immediate GDP growth over consideration of the long-term merits of particular developmental paths.

These broad themes, in different ways, reinforce a common outcome: the Treasury concerns itself with the cost-efficient management of the accumulation model immediately in front of it, rather than orientating economic policy towards a long-term project of accumulation model transformation. At times of growth this translates into an uncooperative and often obstructive stance towards those departments and politicians who would seek to articulate such a project. At times of economic crisis, it means a subordination of all such projects to the goal of minimally adaptive accumulation model repair, and the exercise of Treasury control to neutralise any contrary tendencies within government. This claim constitutes the basis of the most common critique made by opponents of the Treasury within and beyond government for over a century: that it is excessively 'short-termist' in its economic outlook (Wilkes and Westlake, 2014; Berry *et al.*, 2016; Powell, 2014; see Ingham, 1984 for a historical perspective). From this perspective the Treasury systematically fails to perceive the economic contributions of long-term investments that might otherwise be possible through a strategic industrial policy targeting the broader economy, owing to its narrow preconceptions concerning its role and the means to achieving it.

A number of examples from recent history serve to illustrate the impact of Treasury control upon the capacity of the British state to articulate a project of accumulation model transformation. Funding to the industry ministry (the principal centre of responsibility for industrial policy) was dramatically reduced under the incoming Thatcher administration, and again in the post-2008 context. The first episode represents the change in economic thinking wrought by the Thatcher administrations, which arguably took themes that the Treasury had continued to champion throughout the post-war period and generalised them to other areas of policy. As a result, in the years between 1979 and 2007 there was a certain alignment in the policy priorities of the now much reduced Department for Trade and Industry and Treasury, with both advocating a minimalist form of industrial policy that eschewed large-scale strategic interventions and instead sought to amend a narrow range of acknowledged market failures (Davis and Walsh, 2015). The period since the banking crisis of 2008, by contrast, is interesting because a concerted attempt was made by the industry ministries of two post-2008 governments (those of Gordon Brown and David Cameron) to articulate a more substantial strategic industrial policy agenda (Craig, 2015). Yet these nascent attempts were heavily undermined by Treasury opposition. The department saw its expenditure limits reduced by 30% in the 2010 spending review and by a further 6% in the 2013 spending review (Craig, 2015). The department also ceded around 4% of its budget during the 'emergency budget' of 2010.

The defeat of the recent industrial policy agenda at the hands of Treasury budgeting resembles another prominent episode in which Treasury control of economic policy was threatened – the short-lived 'Department of Economic Affairs' established to oversee a national plan of industrial modernisation in the 1960s. Like the post-2008 industrial policy agenda four decades later, this attempt to articulate an alternative approach to economic policy floundered on the deflationary macroeconomic stance imposed by a sceptical Treasury, in that instance made in response to the 1967 Sterling crisis (Ingham, 1984).

Consequently, the Treasury and its nexus with the commercial financial sector poses a very significant threat to any attempt to articulate an alternative means of doing economic policy through the British state. Quite simply, the Treasury view cannot accommodate the kind of long-term strategic investment and intervention necessary to bring it about. It is therefore likely that a green industrial strategy of a size and nature necessary to transform the British accumulation model will face opposition from the Treasury and be subject to the exercise of Treasury control.

Understanding the present impact of Treasury control upon environmental and industrial policy and ascertaining what reforms might prevent this in the future is therefore a vital strategic objective for advocates of an effective environmental state in Britain. In what follows I shall outline some of the ways in which Treasury control is currently containing and distorting the nascent green industrial strategy of the emerging British environmental state, before considering some possible avenues of reform and sites of political engagement through which to achieve it.

4: Treasury Control and the British Environmental State

Since 1997 the British Parliament's Environmental Audit Committee has scrutinised and audited the work of government departments in relation to Britain's environmental policy obligations and goals. In December 2015 the Committee began an inquiry into the Treasury's impact on sustainable development and environmental policy. As yet incomplete, the inquiry nevertheless affords an interesting opportunity to access the views and experiences of environmentalist campaigning organisations, environmental policy think-tanks and businesses invested in the development and deployment of green technologies. My examination of the written evidence submitted to the inquiry uncovered three recurring themes. First, many contributors have argued that the Treasury systematically under-accounts for the economic costs of inaction to environmental degradation. Second, and conversely, they argued that it also fails to take into account the cost-offsetting effects and potential financial returns of public investments made in 'green infrastructure', technologies, and the support of 'green goods' producers. Finally, numerous contributors have also cited instances where the Treasury has undermined the ability of departments with responsibility for energy, environmental and industrial policy to mount effective environmental policies where these are at odds with its own economic policy priorities.

These themes chime closely with the characterisation of the Treasury laid in the previous section. They describe the exercise of Treasury control and a set of narrow, short-termist policy priorities. My contention is that what the contributors are pointing to amounts to more than a series of instances reflecting an under-appreciation of environmental policy on the Treasury's part. Rather, it is in fact a process through which the Treasury is actively and purposefully containing the threat that environmental policy poses to its strategy of recovery through regressive redistribution. It amounts to the exercise of Treasury control upon environmental policy in order to broaden the Treasury's autonomy in the field of macroeconomic policy. It is pointed out by one contributor to the committee's inquiry that the Treasury's attempts to expand its influence in the sphere of energy policy effectively constitute a parallel energy policy agenda centred on natural gas (Powell, 2014). I would argue further that what is being witnessed is the operation through Treasury control of a parallel and distinctly un-green industrial policy, serving as a supporting adjunct to the Treasury's macroeconomic strategy of recovery through regressive redistribution and the project of minimally adaptive accumulation model repair that it entails.

To make this case I examine four post-2008 case-studies of Treasury control, each of which has negative consequences for existing environmental policy goals and for the emergence of an environmental state capable of achieving accumulation model transformation. The first two case-studies concern policy stances within the Treasury's direct remit of macroeconomic policy. The second two represent attempts by the Treasury to expand its influence in policy areas that are formally the domain of other government departments or agencies.

In examining these case-studies, I aim to offer some provisional conclusions about the underlying strategy and motives that have underpinned decisions emanating from the Treasury. Naturally, other interpretations can be made of the same 'behavioural' evidence. What is put forward here is intended to serve as a series of themes to be explored in greater depth in a programme of interviews with former ministers and officials of the Brown government of 2007-10 and the Coalition government of 2010-15. Yet examining decision making across a range of related issues can assist us in narrowing down the thinking behind policy choices. By looking for a consistent thread across multiple decisions it is possible to build a provisional interpretation of what the underlying objectives motivating their choices might be.

The first two case-studies relate to the relative treatment of renewables and fossil fuel energy sources in the field of tax policy. One of the first acts of the Conservative Chancellor upon return to office in 2015 was a fundamental reform to Britain's principal environmental tax – the 'climate change levy'. Since its introduction in 2001 this tax on industrial and agricultural energy was designed to incentivise the consumption of renewable energy. Firms were able to purchase certified units of renewably sourced energy which were exempted from the levy, effectively allowing them to reduce their tax burden through greater renewable energy consumption. This provision was abolished in 2015 at very short notice. At a stroke, renewable energy was made subject to a carbon tax.

The Chancellor's argument was that existing subsidies to renewable energy generators were already adequate to achieve environmental policy targets in the allotted timeframe, and that the exchequer was therefore being needlessly deprived. Whilst criticised as short-sighted in environmental policy terms, this justification is in fact coherent with the Treasury's broader macroeconomic policy stance of fiscal consolidation. The timing of the decision lends credence to the idea that the Chancellor was emboldened to take this step by the formation of a Conservative majority government. An effect of the demise of coalition politics may therefore have been to extend Treasury control by reducing the concessions that Treasury ministers felt obliged to make to coalition partners within government.

Yet, whilst deficit reduction may account for the reform of the climate change levy, the same is not true of the second case-study: changes to the tax regime around Britain's oil and gas industries. Here there has been a considerable lightening of the tax burden, with a corresponding loss of revenue. Since the sharp recession of 2009 offshore oil and gas producers have been the subject of a privileged tax arrangement – so called 'field allowances' – which waive around 50% of the corporation tax of producers operating at those sites in the North Sea that the Treasury considers strategically important. These allowances were worth around £3bn in the period between 2012 and 2014 (Friends of the Earth, 2016). More controversially, the Treasury has extended this kind of support to the onshore extraction of shale gas. In 2013 a new allowance was announced which allows shale explorers to offset 75% of their capital expenditure against corporate tax. This stance is complemented by a recent change to Britain's only other carbon-related environmental tax: the 'Carbon Floor Price'. The floor price obliges those industries subject to European Union emissions regulations (foremost among them fossil fuel-consuming electricity generators) to pay an annually increasing top-up on the EU carbon price. The policy was introduced in response to the crash of the EU carbon price following the 2009 recession. It was intended that the floor price would increase year-on-year; however, in 2014 the Chancellor announced that it would be frozen at its 2015 level of approximately £18 per tonne until 2020.

The short-comings of this stance from an environmental policy standpoint need little rehearsing. In relation to domestic energy supply, the incentivising of further investment in capital-intensive offshore sites of oil and gas extraction and the bringing into being of a new and even more capital-intensive onshore extraction industry stand in tension with Britain's official emissions target. The advice given by the statutory advisory body overseeing these targets is that the most feasible and cost effective way to achieve these overarching emissions reductions commitments is for non-fossil fuel and/or carbon capture and storage-equipped plant to constitute 75% of energy generation by 2030, with the bulk of new investment oriented to renewables over the 2020s (Committee On Climate Change, 2015a). When global moves towards decarbonisation and the shrinking of international fossil fuel markets that they imply are also factored in, one is left with the impression that the Treasury doubts the necessity of rapid domestic and global decarbonisation, instead orienting its policies towards a future in which such a transition occurs at a slower pace, if at all.

Less straightforward to interpret are the Treasury's priorities in its own terms when setting tax policy this way. By loosening the tax burden on fossil fuel extraction and generation, the Treasury makes the task of deficit reduction more difficult in the short term. However, the Treasury's stated objective is to: "when making judgements about fiscal policy… consider the wider economic benefits of oil and gas production, in addition to (fiscal) revenue" (H.M. Treasury, 2014, p.6). Viewed from this perspective, the move can indeed be interpreted as supporting the broader project of stabilising and minimally adapting the existing accumulation model. The oil and gas industry is in fact of central importance to Britain's ailing accumulation model. One way in which this is so relates to the balance of payments. A persistent feature of the model since the 1990s is a chronic current account deficit (ONS, 2016). The oil and gas industry is a significant contributor to Britain's trade position. Although Britain became a net energy importer in 2004, the domestic production of the oil and gas industry nevertheless remains a significant contributor to Britain's current account through exports and the offsetting of imports. Since 2008 it has contributed an annual average of £31bn to the balance of trade, an amount not far short of the average trade deficit of £37bn (Author's calculations, drawing on Oil and Gas UK, 2009; 2010; 2011; 2012; 2013; 2014 and ONS, 2015, Table 1.1). With fossil fuels entrenched in the British transport and energy infrastructure, and with Britain's sclerotic manufacturing export sector in apparently terminal decline, a domestic supply of oil and gas is thus an indispensable matter of macroeconomic composition – all else equal, its absence would make an already seriously poor trade situation almost twice as bad.

This point complements a number of others to which attention has been drawn in recent official publications, including the strategic importance of domestic oil and gas production amid the increasingly visible geopolitics of energy supply, the substantial contribution to growth, employment and tax revenues made by the oil and gas industry and its broader supply chain, as well as its contribution to GDP figures (Department of Business, Innovation and Skills, 2013). In all of these ways, the oil and gas industry supports the ailing British accumulation model. From a perspective that discounts the future costs of environmental change, there is thus a considerable incentive for any department overseeing macroeconomic policy to bolster the industry.

Of course, many of these contributions could in principle be achieved through investment in renewable energy. Yet it is far from clear that they could be accomplished at the same cost, at least from the Treasury's short-termist perspective. A significant factor militating in favour of fossil fuels when viewed from such a perspective is Britain's existing fossil-fuel infrastructure of transport and power generation. In terms of the latter, extending Britain's predominantly natural gas-fired electricity generation infrastructure remains a more competitive option than investment in renewables (assuming, that is, that the resulting assets are allowed to work out their typically 30-year lifespan without premature closure in order to meet emissions reductions targets (on which see DECC, 2011). Gas power has been central to the expansion of British electricity generation since the 1990s, when a rapid switch-over from coal to natural gas-fired plant occurred, dubbed 'the dash for gas' by the press. Environmentalist critics have argued that the Treasury's position on fossil fuel taxation constitutes part of a parallel energy policy that aims to incentivise a second dash for gas (Powell, 2014).

Such a dash is quite coherent with the broader project of restoring and minimally adapting Britain's existing accumulation model. The technology requires fewer subsidies than renewable energy technologies in order to bring new capacity to fruition, as the mature gas-generation technology presents a lower risk profile to investors and remains, on average, the cheapest form of electricity to produce in Britain (DECC, 2012).[3] Because renewable energy plant subsidies in Britain are in large part financed directly by electricity consumers through their energy bills, a gas-centred strategy equates to a lower burden on industrial and household income than would be the case if a more rapid transition to renewables were to be undertaken (the alternative – direct government financing – would require increased taxes or public borrowing, implying a different macroeconomic stance to that preferred by the Treasury). This factor is likely bolstered by the (highly contested) possibility that a 'shale gas revolution' in Britain could deliver falling gas prices on the scale seen in the US. A gas-based infrastructure allows in principle for these and the savings from recent falls in wholesale gas prices to be passed on to energy consumers and registered as lower general production costs and higher consumer spending. In this respect, a gas-based strategy holds the potential to support incomes and aggregate demand at a moment when broader macroeconomic policy has required a withdrawal of public sector demand, potentially easing the economic and political costs of the Treasury's strategy of recovery through regressive redistribution.

All in all, the Treasury's policy decisions within its own remit suggest a considerable engagement with the fiscal elements of environmental and energy policy, one that sacrifices environmental policy commitments to a broader strategy of minimal accumulation model adaptation and recovery through regressive redistribution. This in turn demonstrates the Treasury's continuing antipathy to projects of accumulation model transformation and the ongoing short-term cost and GDP-fixation of the

Treasury view. Yet an ironic outcome of this pattern of Treasury control is that it amounts to a quite extensive industrial strategy, albeit one oriented to accumulation model repair rather than transformation. Thus, for all of its historic antipathy to past attempts by public officials to steer the course of economic development in ways that reflect public purposes, the Treasury appears to have itself 'picked a winner' on the basis that it can serve its policy agenda. Unfortunately, from the point of view of environmental policy, that winner is the oil and gas sector.

The second pair of case-studies reinforce the notion that the Treasury sanctions the sacrifice of environmental policy goals to a minimally adaptive accumulation model repair. They illustrate that Treasury control is exercised beyond its immediate departmental remit to this effect. In both cases, they impinge upon the government department that is most directly responsible for British climate change policy: the Department of Business Energy and Industrial Strategy (formally the Department of Energy and Climate Change or 'DECC').

Prior to 2010, the ministries responsible for energy had operated a range of levy-financed renewable energy subsidies. Until 2011 these were classified as 'non-fiscal' in the national accounts because they operated through levies imposed on suppliers and passed on to consumers through their energy bills.[4] Rather than a grant being made directly to renewable energy generators through government spending, suppliers were instead obliged to pay a certain amount to renewable energy generators (either through the purchase of compliance certificates issued to the generators by the government in the original 'renewables obligation' model, or through an indirect charge to a government agency in the current 'contracts for difference' model). The suppliers would then recoup the cost of the payment from electricity consumers. Because they were not taxes, the policies did not fall within the Treasury's direct remit of control.

However, following the 2010 comprehensive spending review the Treasury enacted perhaps the most blatant example of Treasury control over another department seen in recent years when it imposed the so-called 'levy control framework' (LCF). This rather dry-sounding policy instrument in fact equates to a remarkable imposition of Treasury discretion over the scale of levy-financed renewable energy subsidies, achieved via an annual cap. Compliance with the cap is adjudicated on the basis of forecasts that are subject to review by the Treasury and Office for Budgetary Responsibility (OBR). Should it be in danger of being breached, the energy ministry must reset the scale of levy-financed subsidies so that they become cap-compliant. Failure to do so can result in the remainder being recouped from the energy ministry's departmental budget. At a stroke, renewable energy subsidies have been transformed from a matter of environmental policy reflecting the energy ministry's assessment of the needs of renewable energy generators to a matter of budgetary policy controlled by the Treasury (Lockwood, 2016).

For its first four years the levy control framework operated without controversy. However, in 2015 a minor crisis emerged when the OBR and Treasury announced that the energy ministry was on a path to breach its levy caps in 2020, requiring an immediate resetting of subsidy policy to make up a £1.5bn forecast overspend. The analysis underpinning this position (for which see Office for Budget Responsibility, 2015) appears deeply paradoxical from the point of view of environment policy. The first (and, it later emerged, the major) factor was that declining wholesale energy prices at the end of 2014 were acting to make carbon-intensive electricity generation more economically competitive vis-à-vis renewables, meaning that the spread between the projected subsidy price and the cost of energy that would have obtained without the subsidy arrangement was wider, and the levy consequently of a greater scale.[6] From an environmental policy perspective, it is puzzling that a temporary loss of competitiveness relative to a fossil fuel-based technology should be seen as an argument for *reducing* the scale of the subsidies, especially in relation to technologies that are pivotal to stated environmental policy objectives and which are registering improvements in absolute efficiency. These gains in absolute efficiency were underlined by the second factor in the analysis: the fact that renewable energy installations had generated a greater quantity of energy than had been anticipated at the time that the levy caps were set, meaning that a greater number of units of energy were being purchased at the subsidised rate than would have been the case had the technologies proven less efficient.

In response, the energy ministry acted to make up the 'overspend' by making a number of very significant reductions to subsidies for smaller-scale solar energy projects. The costs of these moves to the development of the British 'green sector' were not trivial: by the energy ministry's own estimates, the cuts to small-scale installations alone were likely to cost between 10,000 and 20,000 jobs by 2018-19 (DECC, 2015). Whilst the Committee on Climate Change did not consider the move a threat to the government's renewable energy generation targets *per se*, it noted that they would become more expensive to achieve as a result of the uncertainty engendered by the decision and resulting increases in capital costs across the renewables sector (Committee on Climate Change, 2015c).

The LCF overspend affair illustrates that, as well as an underappreciation of the economic costs of inaction, the Treasury view is also characterised by a desire to contain the further subsidisation of the renewables sector. The Treasury had made little secret of its intention in this regard. The rationale offered for the LCF was: "to make sure that the energy ministry achieves its fuel poverty, energy and climate change goals in a way that is consistent with economic recovery and minimising the impact on consumer bills" (H.M. Treasury, 2011). The preference is not, as one might perhaps anticipate, explained by reference to deficit reduction, for spending on the subsidies was matched by the levy on consumer energy bills. Yet nor is the justification that the Treasury offered (the impact on consumer bills) an obvious explanation for forcing through a reduction in subsidies, for it has since emerged that official projections of 2020 consumer prices indicate that the price effects of falling wholesale energy prices will offset the total increases in levy costs passed on to consumer energy bills (Carbon Brief, 2016).

A more plausible scenario is suggested by Lockwood (2016), who interprets the imperatives underpinning the LCF as being political ones related to maintaining public support for government policy by controlling the costs passed on to the electorate, rather than ones directly related to the operation of economic policy. For Lockwood, the policy agenda for which the Treasury is seeking to maintain support is environmental policy itself. Yet an equally plausible interpretation, more in tune with the evidence presented so far about the Treasury's broader environmental policy stance, is that the subsidy reductions reflect a strategy to cushion household incomes from the impacts of recovery through regressive redistribution and so limit opposition to it. In this sense, the cuts in levy-financed subsidies were a means to offset a certain amount of public discontent with macroeconomic policy, achieved once again through a sacrifice of environmental policy.

The final case-study relates to what was, at least in principle, a major development in the capacity of the British state to deliver a green industrial strategy: the Green Investment Bank (GIB). The GIB is a publicly owned and capitalised but operationally independent investment bank. It has a statutory mandate to invest in infrastructure projects that are conducive to mitigating climate change or enhancing resource efficiency, biodiversity protection, the natural environment and 'economic sustainability' more broadly.

The GIB represents perhaps the closest Britain has ever come to establishing a national investment bank of the kind common to most advanced capitalist economies. Such an instrument has – and continues to – feature prominently in proposals for state-facilitated industrial modernisation (Mazzucato and Penna, 2015). A state investment bank has three advantages according to such visions. First, sovereign backing makes this institution an attractive destination for risk-averse capital, particularly those associated with institutional investors. Such institutions are therefore able to increase the supply of investment capital at a lower cost than a private institution could. Secondly, the existence of a statutory mandate and the lack of pressure to generate shareholder value allows such institutions to channel investment towards the productive economy over longer time horizons, insulating them from pressures to allocate to unproductive outlets that are more conducive to short-term profits. Finally, the public mandate of such institutions requires them to make investments on a broader basis than profit alone, allowing their activities to reflect public purposes.

The creation of an institution of this kind in Britain is a remarkable development, especially in a context of political-economic crisis, for it represents a potentially transformative challenge to the predominance of commercial financial capital in the British accumulation model. The fact that it should have manifested itself in a *green* form suggests – superficially at least – that green industrial strategy and the realisation of a more sustainable accumulation model has been a real possibility in the post-2008 context. Yet such hopes have not been realised. From the outset, it was envisioned that the institution should operate on commercial terms, and that as well as investing its £3bn initial capitalisation it should also seek to leverage private investment in the manner of a more conventional investment bank by raising money on the capital markets. However, this vital aspect of the Bank's operations has been the subject of a halting act of Treasury control: in the 2011 budget the Chancellor announced that the GIB would be denied the powers to borrow until national debt was falling as a percentage of GDP. In other words, the GIB is not able to operate as an investment bank until the Treasury's project of recovery through regressive redistribution is brought to fruition.

Ostensibly, the rationale for Treasury's opposition to granting the GIB borrowing powers is that this would contribute to public sector borrowing at a time when macroeconomic policy was oriented to eliminating the 'structural deficit'. During this time, the government was collectively maintaining the line that Britain lay exposed to an impending 'debt crisis' – a loss of market confidence in government borrowing owing to an excessive outstanding debt burden (Craig, 2015). On this basis the denial of borrowing powers to the GIB was presented as part of a broader project of economic stabilisation aimed at avoiding debt crisis. Yet it is questionable that this was an accurate description of the Treasury's motives. The department had seen fit to exclude the huge debts and liabilities incurred from the bailout of British financial institutions from the figures upon which it based its policy decisions, doing so on the basis that financial markets would deem this approach 'credible' so long as a clear strategy to recover the costs was in place. The fact that the Treasury has not made a similar assessment of the GIB's liabilities suggests an alternative interpretation: that the Treasury simply does not acknowledge the value of a policy intervention of this kind because it is sceptical of projects of accumulation model transformation, under-accounting for the potential returns of the kind of long-term investments that such an institution would make.

In 2015 it was announced that the government would seek to sell the majority of its shareholding in the GIB, effectively privatising the institution. The rationale offered was that this would allow the institution to qualify as 'private' for national accounting purposes, and thus finally give it access to the capital markets (H.M. Government, 2016). Yet this is not in itself an argument for privatisation, as the Environmental Audit Committee (EAC) pointed out in a subsequent report: it is only an argument for privatisation insofar as opposition to granting the bank borrowing powers is so intractable as to make this option impossible (EAC, 2016).

The implications of privatisation for the GIB's environmental policy goals are likely to be substantial. The statutory mandate which compels the bank to invest only in 'green projects' was conceded to be incompatible with its re-classification as a private organisation. Instead, a 'special share' with veto powers over changes to the Bank's green objective is to be created and granted to a non-governmental organisation. It remains to be seen if this will be enough to ensure the GIB's investments conform to its original mandate. Yet, even if it is, there are reasons to be pessimistic about the scope for the GIB to play a transformative role following privatisation. It is far from clear that a privatised investment bank would be as attractive to risk-averse capital once its *de facto* sovereign guarantee is removed. More fundamentally, however, it is questionable that a fully private bank will be able to operate a business strategy conducive to achieving the GIB's original mandate once subject to market expectations of returns on equity. At around 15%, these are significantly higher than the 3.5% that the government has so far required of the institution (Engelen, 2012). The effects of demands for shareholder value feature prominently in narratives of the under-performance of productive investment in Britain (Ibid). Another privatised financial institution – 3i (formerly the Industrial and Commercial Finance Corporation) – responded to market expectations by withdrawing from its previously mandated role of providing growth capital to small and medium-sized businesses, instead becoming increasingly involved with unproductive mergers and acquisitions activities. Commentators have been concerned that a similar logic could drive the GIB away from lending on projects with long maturities and higher risk profiles, undermining its ability to support accumulation model transformation (EAC, 2016).

Conclusion

The GIB affair has strong parallels with past episodes of attempts to advance projects of accumulation model transformation through the British state. Like the Department of Economic Affairs and national plan before it, it represents yet another example of such a project being defeated at the hands of Treasury control. Like these past cases, it demonstrates the difficulties that the structure of the British state poses to those who would seek to construct a substantive and effective environmental state. By way of a conclusion I shall draw together the implications of the arguments put forward here from the perspective of the environmental state literature, before offering some tentative reflections on the much-needed debate over how this state of affairs could be remedied.

The capitalist environmental state is one in which economic and environmental policy become increasingly inter-twined, with the overarching goal minimising (and, some of its advocates hope, even eliminating) trade-offs between capital accumulation and environmental protection. Whilst the possibility of 'green growth' is highly controversial, it is undoubtedly the case that contemporary capitalist accumulation models are a long way from achieving even the lesser goal of 'greener growth'. For such a goal to be obtained in a timeframe that avoids the worst excesses of ecological crisis, state power must be directed towards economic reconstruction, implying that capitalist environmental states will require substantive green industrial strategies.

The political economy of green industrial strategy raises a whole host of issues that have not been touched upon in this paper (on which see Craig, forthcoming 2016). These include issues of policy design, domestic coalition building, and international coordination and institutional reform. Yet an equally important (and in some senses logically prior) issue concerns the structure of each state. Each environmental state emerges in a unique historical and political-economic context. The structure of each state is a legacy of this unique context with very real political implications for the present. As the British case shows, the intra-state politics which this structure shapes can be as decisive a factor as the struggle of social forces beyond the state. Treasury control will continue to pose a significant challenge to any attempt to construct an effective environmental state in the British context for as long as the British state is organised in the way that it is.

There is therefore a need for environmental state researchers and environmentalist campaigners to pay greater attention to the aforementioned factors. An analysis of the environmental state based predominantly on generalisation and abstract typology lacks the purchase on the strategic terrain necessary to understand how and why a given environmental state is developing in the way that it is, or how to resist those obstacles that are stunting its development. Quite simply, there can be no substitute for country-specific political-economic analysis. Insofar as the environmental state literature aims to be relevant to promoting the processes of state transformation that it studies, it will be necessary for comparativist researchers to enter into continual dialogue with country-specific experts.

Apprehending the British case in these terms reveals Treasury control to be a major obstacle to the emergence of a substantive and effective environmental state. Addressing this obstacle requires us to develop a better understanding of the factors that give rise to the Treasury's counter-productive policy preferences (the 'Treasury view'). The present analysis is an inadequate basis upon which to make final conclusions in this regard, yet it does narrow down our field of inquiry somewhat.

One important question is the degree to which the personal and collective attitudes of individual Treasury personnel shape the Treasury view. In some accounts, the Treasury's priorities are strongly shaped by those of its senior personnel, principally the Chancellor of the Exchequer (Thain, 2014). From this perspective, different leadership at the Treasury could potentially direct Treasury control in a way that is more conducive to the articulation of a green industrial strategy. A similar but broader argument extends this analysis to the attitudes of Treasury officials. In particular, it is sometimes pointed out that Treasury economists share a narrow orthodox intellectual background, suggesting that a greater penetration of heterodox economists (and perhaps even ecologists) into the organisation might lead to different priorities and policy preferences (Green House, 2016).

An alternative and more structural explanation instead emphasises the design of the Treasury as an institution, particularly its mandated functions to maintain macroeconomic stability and promote GDP growth. In this perspective the individual attitudes of politicians and the Treasury's staff are less important than the organisational context which they must navigate when performing their roles. From this perspective the counter-productive exercise of Treasury control might be curbed if the Treasury was unambiguously mandated to pursue *sustainable* development, and then held to account for its successes and failings in this regard (Friends of the Earth, 2016).

There is likely to be truth in all of these perspectives. Indeed, it is quite possible that the weight of factors shifts at different points in time as senior personnel change and the organisation evolves. Unravelling how these and other factors combine in the post-2008 context to reinforce the Treasury's short-termist fixation of accumulation model repair is an important task for researchers of the environmental state in Britain. Upon the answer to this question hinges that of another debate which asks what reforms of the Treasury proponents of a substantive and effective environmental state ought to advocate. The question parallels an older debate among advocates of accumulation model transformation over whether rival departments ought to be strengthened in the sphere of industrial policy or whether instead it would be more effective for the Treasury to be made responsible (and accountable) for this area of policy as well (cf. Wilkes and Westlake, 2014 and Berry *et al.* 2016). The latter option may appear somewhat paradoxical, given what I have argued thus far about the Treasury's stance on accumulation model transformation and environmental policy. Yet, if nothing else, the Treasury has proven remarkably effective at pursuing its policy preferences. To the extent that these can be brought into line with those implied by the environmental state concept, the Treasury may represent a useful asset in the inter-departmental turf wars that proponents of a green industrial strategy will have to navigate.

One of the first acts of the new British prime minister, Theresa May, has been to merge the ministries responsible for energy and industrial policy into a single department: the Department for Business, Energy and Industrial Strategy. It remains to be seen whether or not the inclusion of the term 'industrial strategy' in the department's name indicates prime-ministerial support for a more robust industrial policy agenda, as it does whether or not the combined department will prove a more effective counter-weight to Treasury incursions into environmental policy. Either way, Treasury control represents more than an interesting oddity of British political development. Understanding it is a matter of vital analytical and strategic importance for researchers and proponents of the British environmental state. It is hoped that this all-to-brief engagement will serve to demonstrate this much, and perhaps to spark the interest of colleagues in the host of questions that it serves to raise.

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The workshop, held in September 2016, brought together leading political economists and policy analysts to analyse and debate the challenges posed for contemporary capitalist political economies by the unfolding ecological crisis in which they are all implicated.

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Notes

1. I say 'greener' rather than 'green' because it is far from clear that any model of capital accumulation able to deliver publicly acceptable levels of income and employment can ever be 'green' (at least insofar as 'green' equates to long-term ecological sustainability). On this debate, see Craig (2016).

2. I understand a 'model of capital accumulation' in the same terms as Jessop's concept of an 'accumulation strategy', which refers both to a pattern of demand and supply that facilitates the profitable investment and accumulation of capital in a given spatial context, as well as the supporting societal institutions that enable that pattern to be sustained (Jessop, 1983). These institutions include, but are not limited to, those comprising the state. They allow sufficient coherence across the different aspects of social life for accumulation to be sustained and capitalist crisis tendencies to be temporarily contained. Economic crisis, in this perspective, represents a scenario in which extant social institutions are no longer able to reproduce capital accumulation.

3. Recent claims by the Committee on Climate Change (2015b) that large-scale wind and solar power will be competitive with gas after 2020 rest on the assumption that the carbon price will be 'target consistent' path of £32 to £78p/t over the course of the 2020s, instead of the present level of £18p/t. The same report in which these claims were made is less than optimistic that this will actually occur. I am similarly pessimistic, insofar as the Treasury continues to control the carbon floor price.

4. In 2011 the ONS reclassified this as a form of taxation for the purposes of public sector accounting.

5. The relative importance of the factors emerged when the campaigning organisation, Carbon Brief (2016), successfully pursued a freedom of information request.

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