

The UK's Decision to Stop Heathrow Airport Expansion: Sufficiency, Ecological Modernization, and Core Political Imperatives

DRAFT: Do not cite

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Abstract

Continued pursuit of economic expansion remains central to the dominant political responses to climate change and broader environmental challenges. One response has been to carry on with business-as-usual, pursuing endless economic growth while downplaying the severity of environmental problems. A second, increasingly common response has been ecological modernization, or green growth, which aims to decouple economic expansion and environmental impacts while using environmental reforms to stimulate new technologies and growth sectors. A third, more politically-challenging perspective, is the idea of sufficiency, which questions the relentless expansion of production and consumption. A macro-level critique of economic growth clearly faces daunting obstacles in the current political-economic and cultural context, but is the idea of sufficiency making inroads in other, more limited ways? Under what conditions is this possible? One of the most significant examples of a sufficiency-influenced political decision is the UK Conservative-led coalition's decision to cancel plans to construct a third runway at Heathrow. Environmentalists had long argued that aviation growth conflicted with the UK's aggressive carbon-reduction targets, a position that the Conservative and Liberal Democrat parties embraced despite arguments that Heathrow expansion was essential to the UK economy. This paper examines the political forces behind this decision. The theoretical goal is to gain a greater understanding of the limited conditions in which sufficiency-based policies can emerge, notably by overlapping with other core political imperatives faced by states and political actors.

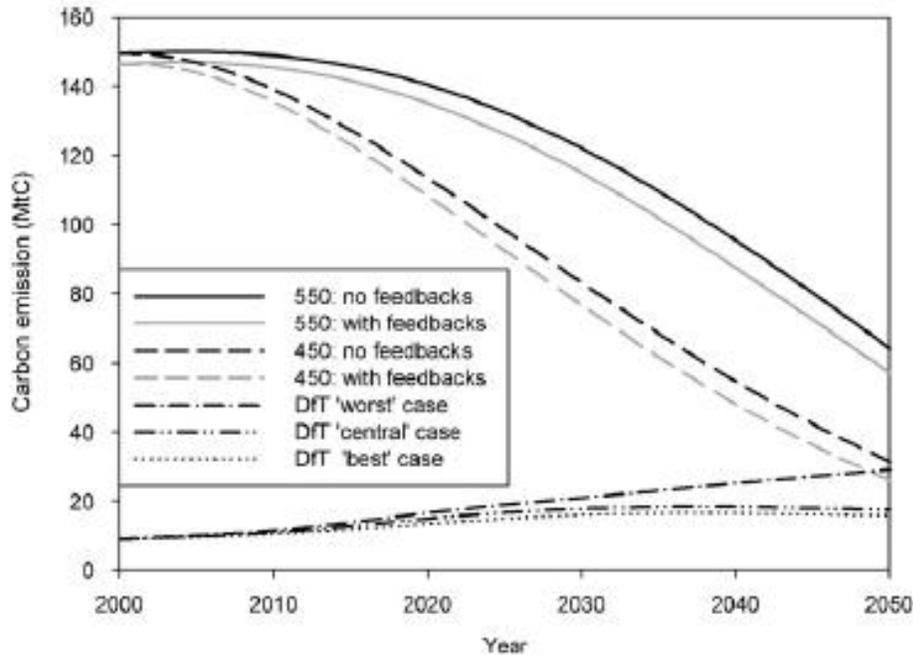
Introduction

In a North London pub in 2007, Graham Thompson, an activist with the direct action, anti-aviation group Plane Stupid slid one of his organization's key weapons across the table to me.¹ It was a graph (Figure 1, below) produced by the Tyndall Centre for Climate Change Research, showing that continued growth in the number of air passengers could result in aviation alone emitting as much as the UK's entire allowable carbon emissions by 2050—and that was based on government projections incorporating generous estimates of potential efficiency and technology improvements.² All other sectors would have to dramatically, perhaps even completely, de-carbonize to make room. "Aviation growth and meeting the targets for emissions cuts—it's just mathematically impossible," said Thompson. Brenda Boardman from Oxford University's Environmental Change Institute echoed his position, stating: "The Government has to confront the contradictions in its policies. Unless the rate of growth in flights is curbed, the UK cannot fulfil its commitments on climate change. . . . Relying on technological fixes alone is totally unrealistic" (Oxford 2006; see also Cairns and Newson 2006). The implication, according to Ben Stewart, Greenpeace's chief media officer, was that: "The aviation industry has absolutely no way out apart from reducing the amount of planes that take off and land. That's a huge leap for them because economic growth is the golden egg of all corporations."³

Three years later, in May 2010, the Conservatives and Liberal Democrats agreed on a program for a coalition government, headed by David Cameron. One headline-grabbing element of the pact was the cancellation of the Labour government's approval of a third runway at Heathrow, along with a commitment to refuse permission for additional runways at nearby Gatwick and Stansted. This decision was taken despite support for Heathrow expansion from groups including the Confederation of British Industries (CBI), the British Chambers of Commerce, and the Trades Union Congress (TUC), backed by the often-heard argument that a "third runway is vital to maintaining the UK's economic competitiveness" (Future Heathrow 2008). "This is a new government that claimed to be business friendly, but their first move was to eliminate one of the best growth opportunities for London and the U.K. and British companies," stated a spokesman for the International Air Transport Association.⁴ In the words of the chairman of Gatwick Airport, it was "mildly extraordinary" that a Conservative-led government had blocked plans for aviation expansion in southeast England (Milmo 2010). Indeed, one Tory lobby group, Conservatives for International Travel, had earlier posted on its website a mock "Wanted" poster of Theresa Villiers, then shadow transport secretary, with the caption: "For the crime of turning the Conservative Party into an anti-capitalist, eco-campaigning arm of Greenpeace" (Dale 2008).

Of course, the Tories were a long way from rejecting capitalism, but they did deliver one of the most significant examples of a policy decision driven by appreciation of the limits to growth—limits at least for carbon-intensive sectors without adequate technological solutions on the horizon, if not necessarily limits for the economy as a whole.⁵ What political forces were behind this decision? What can this case tell us about the conditions in which a politics of sufficiency, which questions the infinite growth of production and consumption, can make inroads within contemporary societies that remain heavily committed to continued economic growth?

Figure 1: UK Allowable Carbon Emissions and Projected Aviation Emissions, 2000-2050



Based on Department for Transport projections of UK aviation emissions compared to contraction and convergence scenarios for 450 and 550 ppmv, with and without the incorporation of biogeochemical feedbacks.

Source: Tyndall Centre for Climate Change Research (Bows and Anderson 2007).

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Theoretical Perspectives

Ecological Modernization

In many countries that have moved beyond inaction and a business-as-usual approach to climate change, a mainstream consensus has emerged around an ecological modernization (EM) project, which aims to decouple economic growth from rising emissions through improved efficiency and ecologically-sound technologies. The “win-win” discourse that accompanies an EM project sees environmental management as “a positive-sum game: pollution prevention pays” (Hajer 1995; see also Murphy 2000, Revell 2005). An EM discourse first emerged in Japan and continental European states known as environmental innovators, but Britain eventually embraced EM as it aimed to link climate policy and economic strategy (Paterson 2001). Strong action to reduce GHG emissions is seen to offer opportunities for “green growth”—through what British Prime Minister Tony Blair (2004) termed a “new green industrial revolution—while also serving as a source of competitive advantage, as those who move first to develop low-carbon technologies can capture the rapidly-expanding global market for emissions-reducing solutions (e.g. Jänicke and Jacob 2004). EM thus transcends, at least rhetorically, the idea of an environment-economy conflict, enabling cooperation among government policy-makers, business leaders, moderate environmentalists, and others.

Although they are conceptually distinct, EM as a *political project* and *discourse* have an affinity with ecological modernization *theory*, which highlights positive environmental

improvements and seeks to account for the processes behind it (e.g. Mol 2003; Mol, Sonnenfeld, and Spaargaren 2009; see also Christoff 1996). EM theory maintains that modern societies are increasingly influenced by ecological rationality, which is transforming key institutions including the state, business and the market, science, and technology. It is thus optimistic about reconciling economic growth and environmental sustainability, and rejects the idea that capitalism's basic dynamics conflict with ecological limits.

Sufficiency

A challenge to EM comes from advocates of sufficiency, who ask how much is enough and question continued growth of production and consumption in the already-affluent global North (e.g. Princen 2003; Sachs, Loske, and Linz 1998; Schor 2005; 2010). As Princen (2005, 6) puts it, sufficiency is “the sense that, as one does more and more of an activity, there can be enough and there can be too much.” The sufficiency perspective draws on empirical findings on the “myth of decoupling” (Jackson 2009, ch. 5), which show that steady output and consumption growth often overwhelms any benefit from eco-efficiency gains, i.e. lower impacts per unit of output. With such concerns in mind, Sachs (2001, 156-7) argues that efficiency alone is not enough: ecological sustainability requires both “technical” and “civilizational” change, “an intelligent reinvention of means as well as a prudent moderation of ends.” In terms of the widely-used I=PAT equation—in which environmental impacts (I) are a function of population, affluence (per-capita consumption), and technology (impact per unit of consumption)—EM focuses on “T,” but sufficiency also sees a need to limit the “A” variable, at least in already-affluent nations.

Sufficiency, conceived of at the macro level, leads to a critique of GDP growth as a dominant social goal—and the quest by ecological economists for ways to manage without growth (e.g. Daly 1996; Jackson 2009; Victor 2008), or even de-growth (Latouche 2010). Sufficiency can also target specific products, practices, and sectors that are considered excessive, e.g. questioning the volumes of meat consumption or air travel, or other manifestations of the modern emphasis on “faster,” “further,” and “more” (Sachs 2001). I refer to this as micro sufficiency, which is most relevant to this paper.

Empirical studies of sufficiency-based responses to environmental challenges have been limited to date. Princen's (2005) study of three localized cases in North America in which the sufficiency principle has been embraced, in opposition to the dominant emphasis on efficiency and economic expansionism, is a notable exception. This study aims to respond to that gap by examining an important case where the idea of sufficiency has impacted public policy.

Environmental Action and Core Political Imperatives

To better understand the daunting obstacles to a sufficiency perspective, as well as the highly constrained opportunities for it in contemporary environmental politics, it is worth considering the core political imperatives of contemporary states. Environmentalists—like participants in other social movements—“have a much better shot at achieving their goals when they can attach their agenda” to one of the state's core political imperatives, argue Hunold and Dryzek (2005, 77). These core imperatives have come to include: keeping domestic order; ensuring survival in competition with other states; raising the revenue necessary to carry out other core functions; economic growth or, in Marxian terms, accumulation; and legitimation, for example, through welfare-state reforms (Dryzek et al. 2003; see also Meadowcroft 2007, 14).

More concisely, one could think of the security, economic, and legitimation imperatives as the core concerns of contemporary states.

For the purposes of this paper, the economic and legitimation imperatives are of particular relevance. EM has a clear advantage over sufficiency in gaining political acceptance since, at its core, it is about reconciling ecological concerns with the contemporary economic imperative, while sufficiency challenges that perceived imperative; nevertheless, as argued below, advocates of sufficiency may find some opportunities where they can at least cast doubt on the economic necessity of certain forms of growth.

Linking environmental goals to the legitimation imperative has in other contexts provided important opportunities for green ideas. For example, in the 1970s, the United States was an early environmental leader. President Nixon, facing a powerful challenge from the anti-war, student, civil rights and other movements, tried to restore political-economic legitimacy in part by embracing eco-reforms (Dryzek et al. 2003, 59). Since then, maintaining legitimacy has increasingly required governments in advanced capitalist countries to perform environmental protection functions (Meadowcroft 2007, 14)—or at least provide the appearance of performing such functions. In the analysis that follows, the linkage between political stances on Heathrow expansion and legitimation within a context of high levels of “carbon consciousness” is of particular importance.

Sufficiency and the Conservative Party

Although the party of Margaret Thatcher is not the most intuitively obvious place to find sufficiency-based thinking, under David Cameron such ideas made notable appearances, albeit in more limited form than a serious direct challenge to continued economic growth. One intermediate measure long favoured by Greens and other critics of growth is the replacement of GDP as a measure of economic well-being. Cameron (2006a) picked up on this theme, stating, “It’s time we admitted that there’s more to life than money, and it’s time we focused not just on GDP, but on GWB - general well-being.” Likewise, Cameron (2006b) stated: “We have always known that money can’t buy happiness. But politics in Britain has too often sounded as though it was just about economic growth.” Cameron reportedly has long admired E.F. Schumacher, author of *Small is Beautiful*, a key work of green economic thought. Cameron’s senior policy advisor even claimed that the pillars of the Tories’ “big society” idea are consistent with Schumacher, and adds that there is “an urgent sense of needing to embrace enoughness” (McCrum 2011). (Of course, in a society still very ridden by class disparities, one might ask, enoughness for whom?)⁶

Cameron also set up the Quality of Life Policy Group in 2005 to propose non-binding policy recommendations to the party’s shadow cabinet, with a particular focus on climate change and “social unease.” It was chaired by former Environment Secretary John Gummer and vice-chaired by Zac Goldsmith, editor of *The Ecologist*, son of late billionaire Sir James Goldsmith, and nephew of the radical anti-industrialist green, Edward Goldsmith. Sufficiency-oriented thinking was very prominent, although ultimately not dominant, in the Group’s report, *Blueprint for a Green Economy*.

“The great Error of our Nature is not to know where to stop; not to be satisfied with any reasonable Acquirement; not to compound with our Condition; but to lose all we have gained by an insatiable Pursuit after more.” This observation by conservative political philosopher Edmund Burke in 1757 begins the report’s opening chapter (Quality of Life Policy Group 2007, 8). It is followed by a radical green analysis of “the problem with growth,” a “one-time binge” of which

is said to have already taken humanity beyond the planet's limited capacities (p.10,12). At the same time, "material prosperity has not made us a contented society" and "beyond a certain point—a point which the UK reached some time ago—ever increasing material gain can become not a gift but a burden" (p. 8). Furthermore, prioritizing economic growth threatens real sources of satisfaction by weakening community cohesion and eroding work-life balance, resulting in the modern malady of "influenza" (p. 20, 26-7, 41). This Tory report referred favourably to the downshifting movement and the "growing thirst in society to slow things down" (p.21), adding that:

If . . . our appetite for material goods continues on its current trajectory, it is unlikely that resource-use efficiency in and of itself will halt or reverse our impacts on the planet, and in particular its ability to maintain a stable climate. . . . in some circumstances increasingly efficient or 'greener' production processes can lower the costs to business and thus, paradoxically, ultimately lead to higher total rates of production and consumption. . . . Simply cleaning up existing lifestyles and patterns of economic growth will not take us far enough. . . (p.24-25).

This passage and others like it sounded like a deep critique of economic growth and the limits of decoupling. However, they were embedded within a more conventional EM message about the continued need for economic growth, as long as it is decoupled from environmental resource demands, redefined to focus on well-being, measured differently, and put on an equal footing with "social and environmental growth" (p.9, 15, 25). In the end, the language of EM prevailed, with an embrace of "sustainable economic growth" (p.22) and calls for "greater resource productivity" to be put "at the heart of our value system" (p.24). Indeed, the Conservative Party's (2007) news release on the report ignored the "problem with growth" to emphasize an "agenda to make Britain a world leader on green growth."

The *Blueprint* pushed a critique of economic growth perhaps as far as one could go within contemporary mainstream politics, but ultimately could not escape the perceived imperative of growth and a version of EM. Yet at a micro level, the *Blueprint* did contain calls for strong limits on certain carbon-intensive activities and technologies, such as an end to "grandiose programmes of road-building" as part of a need "to challenge the ascendancy of the motor car" (p.309). With regard to aviation, it stressed that, the "the Government's policy of actively encouraging aviation growth is at odds with the UK's commitment to tackle climate change," adding that there is a need to "head off air-dependent lifestyles facilitated by cheap flights, based upon second homes abroad or even international commuting" (p. 351). The report acknowledged the limited prospects for technological solutions to aviation emissions, noting that only "very modest efficiency gains are likely to be delivered" within a relevant timeframe, leading to the conclusion that "some form of demand management is inevitable . . ." (p. 351). It therefore called for taxes to discourage the rapid growth of short-haul domestic flights, greater emphasis on high-speed rail and video-conferencing, and, most notably, a moratorium on airport expansion (p. 353-6).

It should be emphasized that the *Blueprint* was not official party policy. Other segments of the party were simultaneously putting forward contrary perspectives, such as MP John Redwood's report on economic competitiveness, which included a call for increased airport capacity and new, privately-funded motorways, both of which were deemed vital to continued economic success (Economic Competitiveness Policy Group 2007; Parker 2007). At the Conservative Party conference in October 2007, Cameron jettisoned the Quality of Life Policy

Group's well-being focus and the critique of excessive materialism in favour of an agenda believed to have more electoral appeal and capacity to unite disparate groups within the party. Nevertheless, several of the *Blueprint's* conclusions were to influence Conservative policy, notably with regard to aviation.

According to anti-aviation campaigner John Stewart (2010, 29), the Quality of Life Policy Group's report "revealed that new thinking on aviation might well be emerging within the Conservative Party." He adds, "I just don't think the aviation industry believed it I think they assumed that, whatever [the Group] might recommend, the traditional party of business would simply not oppose Heathrow expansion." That assumption turned out to be very wrong.

Factors Behind the Conservative-Led Government's Decision

The decision of the Conservative-Liberal Democrat coalition government to scrap Heathrow expansion plans was a product of a range of factors and years of efforts by anti-aviation campaigners. While the Liberal Democrats had long been critical of aviation growth on ecological grounds, it was not until August 2008 that the Conservatives announced that they were opposed to the third runway. The currents of sufficiency-based thinking within the Conservative Party discussed above were certainly not the only factor in this evolution, but the call to stop aviation growth did become linked to the need for legitimation in an age of climate concern. As for the economic imperative, arguments that Heathrow expansion was economically essential were called into question and effectively neutralized.

A Broad Anti-Expansion Coalition

Activists who played a key role in the Heathrow campaign's success emphasize the importance of constructing a wide-ranging movement cutting across all sectors of society (Garman 2010; Stewart 2009, 464). As influential environmental writer George Monbiot (2006) put it long before the outcome was assured, "All over the country, a coalition of homeowners and anarchists, of Nimbys and internationalists, is mustering to fight the greatest future cause of global warming: the growth of aviation." The campaign began with local groups, such as HACAN⁷ Clear Skies and the No Third Runway Action Group (NoTRAG), and their councils who were fighting against noise, air pollution, and the threatened bulldozing of communities. Over time, the campaign grew to include large environmental organizations such as Greenpeace, WWF, and the Royal Society for the Protection of Birds, as well as development groups such as Oxfam and Christian Aid concerned about climate impacts in the global South. The local campaign also linked up with anti-airport activists across Britain to go beyond NIMBY-ism and fight aviation expansion on a national basis. As John Stewart (2009, 464) of HACAN Clear Skies put it, "To make possible this coalition, the campaign had to be about more than local concerns such as noise and community destruction. Above all, it had to be about climate change."

Another key, albeit controversial element of the campaign was the use of non-violent direct action, led by activists from Plane Stupid. Such actions included disrupting aviation industry conferences, unveiling a banner from the Palace of Westminster labelling the House of Commons "BAA HQ,"⁸ the sliming of Business Secretary Peter Mandelson with green custard, an activist super-gluing himself to Prime Minister Gordon Brown, and the 2007 Climate Camp at Heathrow that brought global attention to the issue. Elsewhere, at East Midlands Airport, Plane Stupid activists even occupied a taxiway, where a Baptist minister held the "Sermon on the Runway." Such tactics could never be successful on their own, but they were able to draw

attention to the wider movement’s demands. Had construction on the third runway begun, there was every reason to believe years of civil disobedience would have followed, building on the experience of the successful anti-road-building movement of the 1990s.



Sermon on the Runway, September 2006 (photo: Plane Stupid)

Ultimately, this nation-wide coalition turned a local struggle against Heathrow into what Labour rebel MP John McDonnell called the “iconic battleground for the campaign around climate change” (Mehr 2008; see also Stewart 2009, 464).

Legitimacy in a Carbon-Constrained World

One impact of the anti-aviation campaign was considerable stigmatization of air travel. The Bishop of London stated that “Flying is a symptom of sin” (Leake 2006), while *The Economist* (2007) chose more secular language, referring to air travel as “the new farting loudly.” Growing concern over aviation led Standard Life Investment’s ethical funds to drop all airline stocks from their portfolio after surveying their investors’ wishes and concerns—an illustration that, in some eyes, airlines were now “akin to arms dealers” and cigarette makers (Jamieson 2008). Meanwhile, in the pages of the *British Medical Journal*, doctors debated whether flying to international medical conferences was “an outdated luxury the planet can’t afford” (Drife 2008; Green 2008). Tony Blair himself was blasted in the media for his transatlantic holiday flight to former Bee Gee Robin Gibb’s Florida beach mansion (Woodward and Watt 2007).



These proposed warning labels for flights from enoughenough, World Development Movement, Greenpeace, and Plane Stupid appeared as ads in *The Guardian* on July 2, 2007

In this new cultural context, political positions on Heathrow expansion became a matter of establishing legitimacy. “If you were a politician, how you felt about the third runway became a test of your commitment to dealing with climate change,” said Ben Stewart of Greenpeace UK (quoted in Rosenthal 2010). Although Tony Blair and Gordon Brown regularly highlighted the urgency of climate action, and did much to give the UK an international reputation as a climate leader, the Labour government’s approval of Heathrow expansion plans in January 2009—a decision that *The Guardian* (2009) referred to as a “rare moment of truth for government”—undermined much of its green credibility at home. The Conservatives (Villiers 2009a) and Liberal Democrats (2009) predictably denounced the government’s failure to pass this test of green credibility. The decision roused the ire of many others, including Oscar-winning actress Emma Thompson (2009), who wrote in a letter to Greenpeace supporters, “They’re asking all of us to reduce our energy consumption while they build another runway at Heathrow. I think it’s the most egregious piece of hypocrisy I’ve seen in a long time.”

The Conservatives were not to allow themselves to be tarred with the same brush. In opposition, David Cameron put considerable effort into greening the party’s image, adopting a new squiggly tree logo and, for a time, the slogan of “vote blue, go green.” Most importantly, the Tories sought to “out-green” the Labour Party on a number of issues⁹—including Heathrow expansion—as part of their effort to appear politically centrist, overcome their Thatcher-era reputation as the “nasty party,” and become electable again. Once in power, the Conservatives would have lost their hard-won green credibility had they not lived up to their Heathrow pledge. (Backsliding on this pledge was not a likely prospect in any case given their coalition partners’ strong anti-expansion position.) Instead, the lead party in the self-proclaimed “greenest government ever” felt it was a better option to confront actors in the business community who would normally be part of their constituency. In defending the third runway cancellation, Transport Secretary Philip Hammond (2010) told his Airport Operators’ Association audience directly that, “No government with a commitment to carbon reduction targets can adopt a crude ‘predict and provide’ approach to aviation capacity while aircraft CO₂ remains an unresolved issue.”

Taking on the economic case for expansion

Anti-expansion campaigners had succeeded in turning Heathrow expansion into a test of political legitimacy in a context of cross-party agreement and widespread social consensus on the need for strong climate action. However, another key task was to challenge the economic case for aviation growth presented by powerful political actors. As campaigner John Stewart (2010, 8), recounts, “We reasoned that we would make little headway unless we challenged the prevailing assumptions that airport expansion was essential for the economy.”

For many within business, the stakes were high. The British Chambers of Commerce (BCC 2009) estimated the value of a third Heathrow runway to be £30 billion, with each year of delay in expansion costing £1 billion in lost productivity. British Airways Chief Executive Willie Walsh went further, warning that, “If we as a country turn our back on expanding Heathrow, we are throwing in the economic towel—and must prepare ourselves for the consequences of a low-growth, or perhaps no-growth, economy in the future” (BBC 2007). The threat of Heathrow falling behind rival airports in Paris, Amsterdam, and Frankfurt—where a fourth runway was planned—became a key argument of expansion advocates. Related fears were raised that London and its finance sector would lack adequate connections to emerging markets such as China.

“Business needs to fly. London is a centre of world trade. Without access to its global markets, London could lose its crown to New York or to increasingly influential Dubai or Shanghai,” said Baroness Jo Valentine, chief executive of London First (2008), an organization representing large businesses in the capital.

The Labour government, known for its efforts to appear business-friendly and its “revolving door” of connections to the aviation industry,¹⁰ put forward a similar message. Gordon Brown (2007) said of Heathrow expansion that, “Our prosperity depends on it: Britain as a world financial centre must be readily accessible from around the world,” adding that a new runway would “help secure jobs and underpin economic growth” (Bowcott 2010).

The labour movement was also a key source of calls for aviation expansion. The Trades Union Congress was part of the aviation lobby groups Future Heathrow and Flying Matters. The latter was a coalition—including airport operator BAA, airlines, aerospace manufacturers, and travel agents—launched in 2007 to fight back against the anti-aviation campaign. TUC Secretary Brendan Barber welcomed Heathrow expansion plans, stating that, “Aviation is key to the UK economy and will support the creation of many more quality jobs” (TUC 2009). Support for Heathrow expansion also came from the Transport and General Workers’ Union, GMB-Britain’s General Union, and Unite, the main union representing civil aviation workers. The latter argued that “without expansion, Heathrow will go into certain decline” and highlighted the 50,000 jobs linked to construction of the new runway and terminal that would help provide an expansionary boost for an economy in recession (Unite 2008).

With the leading voices of business and the trade unions, along with the Labour government, all arguing that the third runway was essential, one might have expected their economic arguments to trump concerns over green legitimacy. However, anti-aviation critics put considerable work into taking apart the economic case—a task aided by the new economic value attached to carbon emissions.

Critics poked holes in the British Chambers of Commerce analysis, noting that its claim of £30 billion in benefits from a bigger Heathrow did not take into account the costs of added carbon emissions, noise, air pollution, and traffic congestion.¹¹ The Liberal Democrats, using the government’s revised estimate of the shadow price of carbon emissions, showed that the expected benefits of Heathrow expansion would be all but wiped out by climate costs (Adam 2009). Meanwhile, a WWF commissioned study concluded that proper costing of carbon emissions, among other tweaks in assumptions, would turn the government’s estimated £5 billion benefit from Heathrow expansion into a £5 billion loss (Buchan 2008). The New Economics Foundation, a think tank critical of a conventional growth paradigm, came up with similar numbers, and concluded that “building a Runway 3 would destroy rather than create value” (Kersley and Lawlor 2010, 3). These analyses suggested that Heathrow expansion was a case of “uneconomic growth,” using the terminology of ecological economist Herman Daly (2007). Although the Labour government did not go quite that far, revised calculations of environmental costs did eventually force the Department for Transport to downgrade its own estimate of the benefits of the third runway from £5.5 billion to less than £1 billion (Gray 2010).

Other aspects of the economic case for the third runway also came under scrutiny—often by those who were not necessarily against aviation growth per se. The idea that Heathrow had to expand to serve as the UK’s aviation hub was questioned by BA’s former chief executive (Ayling 2008), who argued that the hub-and-spoke model had proven ineffective. Likewise, in its dismissal of the case for expansion, *The Economist* questioned the economic value of international transfer passengers “who never leave the airport.” Meanwhile, in a study

commissioned by HACAN Clear Skies, the Dutch consultancy CE Delft concluded that the models behind the government's case for expansion vastly over-estimated the net benefits. It noted, for example, that if aviation did not expand, people would find jobs in other sectors as consumers would spend their money on other goods and services (Boon et al. 2008). Critics also maintained that more airport capacity would worsen the UK's multi-billion-pound tourism deficit by enabling more Britons to holiday elsewhere (Quality of Life Policy Group 2007, 355; Sewill 2009, 4, 17; Stewart 2009, 466). The *Sunday Times* (2009) and the green columnist George Monbiot (2009b), among others, found common ground in questioning whether air travel would grow as rapidly as the Labour government assumed, as passenger numbers began to fall for the first time in nearly two decades (CAA 2009). The recession was one reason for the declining numbers. Another factor that made the economic case for the third runway "unconvincing" for Theresa Villiers, then Tory shadow transport secretary, were the "huge efforts being made to reduce business travel" to cut both costs and carbon footprints,¹² with the growing use of videoconferencing offering one important alternative.

These various criticisms added up to an ability for the Conservatives, who as noted above were aiming to solidify their green credentials, to take increasingly strong positions in response to claims that expansion was economically necessary. By June 2008, David Cameron was able to state that, "There are now increasing grounds to believe that the economic case is flawed, even without addressing the serious environmental concerns" (Eaglesham and Done 2008). This was followed, that September, by a declaration that a Conservative government would scrap plans for third runway (Villiers 2008).

Splits in Business and the Trade Unions

Questions over the economic case for expansion eventually opened a split within business. In May 2009, thirteen business leaders from the financial, media, and high-street retail sectors—including James Murdoch (son of Rupert) of News Corporation—wrote a letter to *The Times* entitled "Business can do without a third runway." The letter expressed doubt over the economic claims made by expansion advocates, while also touching on issues on legitimacy and environment. According to the authors, "... the business case for the third runway simply does not stack up. Moreover, millions of people in the UK oppose the new runway. They are our customers and our colleagues. The business community must take account of the strongly held views of those living in the broader community in which we operate" (Armstrong et al., 2009). They added, "Climate change cannot be ignored and our approach to transport must reflect the seriousness with which we take our Climate Act target to cut emissions by 80 per cent by 2050." The UK's leading business organizations such as the CBI remained committed to Heathrow expansion; nevertheless, this rift within the corporate world provided a great opportunity for anti-expansion campaigners to advance their case. As Stewart (2010, 39) put it, "The business opposition, when it eventually did come, was very important to the campaign."

In fact, some businesses were ready to snap up the opportunities from a turn away from aviation growth. Eurostar (2009) noted that while airlines were pledging to cut emissions 50 percent by 2050, its high-speed rail services to the continent offered "an immediate 90% cut in journey emissions," while predicting that domestic air travel would lose millions of passengers if a promised British high-speed network were built (Milmo 2009a). Likewise, BT (2009) marketed its videoconferencing services as a carbon-cutting, cost-saving alternative to flying. Thanks to anti-aviation activists, it could also highlight the following business benefit: "Avoid negative

publicity - prevent bad publicity by being socially responsible, don't be shamed by pressure groups.”

Meanwhile, an alternative current within the labour movement broke with the TUC's position and came out against aviation expansion. Six trades unions, including the public service union Unison and the RMT (the National Union of Rail, Maritime and Transport Workers), joined anti-aviation campaigners in taking out a full-page ad in *The Times*, stating that, “If the government pushes ahead with expanding our airports, including Heathrow, the UK will never be able to meet the new target of cutting emissions by at least 80% by 2050 and play its part in fighting climate change.” Calling the economic case for a third runway “unproven,” the union-backed ad stated that the £13 billion would “be better spent on a low carbon and efficient high speed rail network linking the UK's major cities with the rest of Europe” (Unison et al. 2008).

New Political Dynamics in a Carbon-Constrained Environment

It should be emphasized that a key factor in the politics of Heathrow expansion—and the emerging splits within business and labour—was the impact of newly-imposed carbon limits. Under the Climate Change Act of 2008, backed by all three main political parties, the UK became the first country with legally binding targets for deep GHG reductions: 34 percent below 1990 levels by 2020 and at least 80 percent by 2050. The Act also introduced five-year carbon budgets and a new Committee on Climate Change (CCC) to give the government independent expert advice on its carbon-reduction targets and how to meet them cost-effectively. The institutionalization of carbon constraints had an impact on economic calculations through the negative value put on GHG emissions, as discussed above, but their political impact extended further.

The impact of the Climate Change Act was felt in March 2010, when a High Court judge ruled that the government's approval of Heathrow expansion was without basis and its claims to the contrary were “untenable in law and common sense.” Not only did Lord Justice Carnwarth (2010; see also RBWM 2010) argue that increased estimates of the social cost of carbon emissions had not been properly taken into account; most significantly, he ruled that the government could no longer base aviation policy on its 2003 Air Transport White Paper (DfT 2003), which outlined a strategy of expanding airport capacity to cater to projected demand growth.¹³ The judge in effect told the government to go back to square one to produce an aviation policy in line with the Climate Change Act and other key developments since the 2003 White Paper.

Another implication of the new carbon constraints was an increasingly evident conflict between aviation expansion and the interests of other economic sectors. Given a fixed carbon budget and the lack of adequate technological solutions to aviation emissions, the greater the expansion of aviation, the greater the emissions reductions burden faced by other sectors. Indeed, there was a wide divergence between the expected emissions reduction in aviation compared to other sectors. In January 2009, the Labour government set a target that UK aviation emissions of CO₂ in 2050 should not exceed 2005 levels—that is, *122 percent above 1990 levels*. The implication was that other sectors would have to cut their CO₂ emissions by roughly 90 percent below 1990 levels to meet the overall 80 percent reduction target (Table 1).

Table 1: UK greenhouse gas emissions and targets

	1990 (MtCO ₂ e)	2050 (MtCO ₂ e)	Change from 1990-2050
GHGs (incl. IA&S)*	797	159	-80%
Aviation (domestic and international)	16.9	37.5	+122% (equal to 2005 levels)
GHGs (excl. IA&S)	774	118	-85%
Non-CO ₂	183	55	-70%
CO ₂ (excl. IA&S)	591	60-70	~ -90%
* IA&S = international aviation and shipping			
Data Sources: Committee on Climate Change (CCC 2010, 118); Department for Transport (DfT 2009, 174)			

Plane Stupid spokesperson Leo Murray (2009) saw the issue this way: “the government plans to let air travel stick at emissions levels that are already double what they were in 1990, and force every other person and every other sector of the economy to make even bigger cuts to accommodate this special treatment.” The implication of the new carbon constraints was also evident to Conservative shadow transport secretary Theresa Villiers (2009b), who stated that, “it will be virtually impossible to keep [our climate change] promises without a slower long term aviation growth rate. . . . Nor would it be fair to ask other sectors to make much deeper cuts to give aviation the head room for continuing levels of very high growth.” Meanwhile Liberal Democrat shadow transport secretary Susan Kramer (2009) commented, “I wonder how long the business community will continue to support the case for a new runway when it is the economy making all the sacrifices to allow it to go ahead.”

The aviation sector itself began to see internal splits over shares of the limited carbon pie. This was evident in December 2009, when the Committee on Climate Change released its report on how to achieve the government’s target that aviation emissions in 2050 should not exceed 2005 levels (CCC 2009b). Lord Turner, chair of the CCC, summed up a key conclusion: “Given the likely pace of technological progress a demand increase of up to 60% but no more could be compatible with the government’s target. Aviation policies should be consistent with this overall limit on demand growth, unless and until more rapid technological progress than currently anticipated makes any greater increase compatible with the target” (CCC 2009a). Since demand was projected to grow by 200 percent, significant additional demand-reduction efforts would be needed. The need to limit demand growth did not necessarily rule out Heathrow’s third runway—as some climate campaigners hoped the CCC would conclude—but it did mean that such expansion would inevitably come at the expense of growth at other UK airports. As Plane Stupid (2009a) summed up the implications: “it’s regional airports versus Heathrow in the fight to expand, because once we hit 60%, forget it.” The Campaign for Better Transport similarly concluded that if Heathrow’s third runway were built, respecting the government’s climate targets would require other airports to abandon their expansion plans (CBT 2009; Webster 2009). Fearing just such a scenario, Birmingham International Airport’s chief executive backed the Conservative Party’s pledge to block expansion at Heathrow, Gatwick, and Stansted (Milmo 2009b; Webster 2009).

Conclusions

Environmentalists have long argued that humanity must come to terms with the limits of an ecologically full world. The implications of those constraints have begun to become apparent in the case of aviation, an economic sector with no adequate technological solutions on the horizon for its growing emissions problems.

Challenging the growth of a particular sector is a far less daunting than taking on the growth of the economy as a whole; the idea of sufficiency faces far better prospects at the micro rather than the macro level. Nevertheless, questioning the expansion of a sector such as aviation still faces enormous obstacles given the power of the economic interests who maintain that its growth is essential to competitiveness, job creation, and the prosperity of the wider economy. At first glance, it is far from obvious that any government—especially a Conservative-led government—would be receptive to calls to block aviation growth. The example of Heathrow's third runway reveals that forms of carbon-intensive growth—even those with the backing of powerful political-economic actors—can be stopped in a context where political legitimacy is at stake. In this case, a broad anti-expansion coalition succeeded in turning Heathrow into a symbol of whether political leaders were committed to act on their own rhetoric and the widespread public concern about the urgency of climate change. The Labour government failed this test of green legitimacy, but for the Conservatives, a commitment to block Heathrow expansion was a key component of their project of greening their image, which was central to their efforts to present themselves as a moderate, electable alternative. In this case, a sufficiency-oriented approach became linked to the legitimacy imperative of key political actors.

Ideas of sufficiency clearly have a much more difficult task of attaching themselves to the economic imperative. Sufficiency at the macro level is, in fact, about calling into question the perceived need for economic growth. In this micro-level case, the task facing opponents of aviation growth was less daunting. It was not to challenge that overriding imperative or to link their cause to it, but mainly to cast doubt on the economic case for expansion and neutralize the claims that this form of growth was necessary. Anti-expansion forces did not necessarily have to win the economic debate, but they did at least have to show that the economic case was inconclusive so that the decision could be made on other grounds. The economic value put on GHG emissions—which was a product of the UK's institutionalized commitment to deep carbon reductions in the years ahead—was a key element in the changing perceptions of the economic case for aviation growth. Over time, this helped to open up space for some business leaders and trade unions to break ranks with their national organizations.

Furthermore, the limits imposed by the Climate Change Act created a new political dynamic. It had become increasingly clear that with a shrinking carbon budget to be divided in the years ahead, the unfettered expansion of aviation would increase the emissions-reduction burden faced by other sectors. A limited carbon budget also pitted parts of the aviation sector against each other, as it became clear that Heathrow expansion would rule out growth at other airports in the years ahead. In such circumstances, ideas of sufficiency may actually find supporters within business whose economic interests are harmed by others seeking to grow.

Similarly, the growth prospects of some businesses that provided alternatives to air travel, such as high-speed rail or video-conferencing, were enhanced by limiting the growth of aviation. With such businesses in mind, the lines become blurred between sufficiency and ecological modernization, as limiting the growth of one sector create economic opportunities for another. Indeed, the decision to scrap Heathrow expansion did not represent a break with the wider commitment to economic growth and a project of ecological modernization. Rather, it was a

boundary issue, where the EM and sufficiency perspectives overlapped and those who favoured green growth could find common ground with others who saw limits to growth.

Looking ahead, the battles over aviation growth in the UK are not over. The government's moratorium on airport expansion in the London area is not necessarily permanent, while struggles to stop expansion at smaller regional airports continue. There is a significant current within the Conservative Party of people who rejected expansion at Heathrow, but are favourable to expansion elsewhere—including London mayor Boris Johnson, who has favoured construction of a new airport in the Thames Estuary. Of course, pursuing such projects would call into question the commitment of political leaders to strong climate action, which has become a powerful aspect of legitimation. However such issues evolve in the future, the battle over the third runway represents a key victory for the idea that technology cannot solve every environmental problem and some forms of growth must be limited.

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Endnotes

¹ Interview, May 2007.

² Assuming a weak 550 ppmv of CO₂ stabilisation target, and using government projections of aviation emissions growth, the Tyndall Centre showed that aviation alone would account for between 25 and 51 percent of the UK's 2050 carbon budget. However if that outdated target were replaced with 450 ppmv, giving better odds of staying below a 2 degree Celsius increase, then aviation would account for between 50 and 112 percent of the UK's 2050 carbon budget (Bows and Anderson 2007:106-107).

³ Interview, May 2007.

⁴ Steve Lott, quoted in Rosenthal (2010).

⁵ Some scope does exist for improved engines, new airplane body designs, and other efficiencies—and perhaps an eventual, contentious shift to greater use of biofuels. However, unlike most other sectors, there are no technological solutions on the horizon in the foreseeable future with the promise to reconcile projected aviation growth rates with absolute reductions in GHG emissions (CCC 2009b)—a reality that figures within the industry have acknowledged. For example, airport operator BAA (2007) acknowledged that “aviation is growing at a faster rate than technology can reduce emissions and at present there is currently no significant alternative to burning kerosene.”

⁶ The current round of deep cutbacks to social programs in Britain would appear to represent a case of putting limits on the incomes and consumption opportunities of lower-income groups without any comparable evidence of “enoughness” being applied, for example, to the bonuses of finance sector elites.

⁷ Originally, the Heathrow Association for the Control of Aircraft Noise.

⁸ BAA is the airport operator, formerly known as the British Airports Authority.

⁹ For example, in opposition, the Conservatives came out in support of a Climate Change Bill with legally-binding targets, a strengthening of the 2050 emissions targets from 60 to 80 percent, German-style feed-in tariffs and a smart electricity grid to boost the lagging renewable sector, and measures to rule out new coal plants without carbon capture and storage—often forcing the Labour government to catch up to its proposals.

¹⁰ See, for example, Ungoed-Thomas (2008).

¹¹ (Plane Stupid 2009b)*

¹² In the House of Commons, Villiers cited a study conducted for WWF that found that 89 per cent of FTSE 350 companies expected to cut their number of flights in the next ten years (Hansard 2009).

¹³ The judge also ruled that the issue of how more passengers would get to the airport had not been adequately considered.