



Regional Just Transitions in the UK: Insights from 40 Years of Policy Experience

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About the Project

This report is part of a series of papers prepared by Resources for the Future (RFF), Environmental Defense Fund (EDF), and other partners that examine policies and programs to promote fairness for workers and communities in a transition to a

low–greenhouse gas emissions economy, often referred to as a just transition. The series looks at existing public policies and programs, grouped thematically as “tools in the toolbox” for policymakers seeking effective strategies to address challenges associated with transition. We focus on policies and programs that can support workers and communities in regions where coal, oil, or natural gas production or consumption has been a leading employer and driver of prosperity.

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1. Introduction

The industrial economy is expected to experience vast changes over the next 20 years as clean energy technologies displace fossil fuels. These transformations will create opportunities and challenges, with many workers needing new jobs and many communities requiring new engines of growth. Such changes are an inherent part of a dynamic economy, but the risks that emerge from the transition to a low-carbon economy are distinctive. Unlike other economic transformations, a rapid clean energy transition will likely be the result a vast collective choice facilitated by sweeping new policies. Although it will produce great benefits globally by arresting and reversing growth in greenhouse gas emissions, without some measures to offset the effects on local labor markets and economies, this transition will also impose hardships on people and regions connected to fossil fuel-dependent industries.

Consequently, policies need to engender a “Just Transition,” with participatory decision-making processes and equitable sharing of the benefits and costs of transition. The concept of a Just Transition has multiple dimensions. In the broadest sense, it encompasses two criteria. First, the benefits and costs of a sustainable transition of a country’s economy are fairly distributed. For example, low-income consumers should not be made to face exorbitant costs from the need to transition to alternative fuels or forms of transportation. Second, an environmentally sustainable transition should promote inclusive growth by “contributing to the goals of decent work for all, social inclusion and the eradication of poverty” (ILO 2015). For a Just Transition, three groups need to be considered: consumers, workers in particular industries, and members of communities in the affected regions.

Green and Gambhir (2020) identify three types of policies to support those three groups. First are compensation policies that compensate for financial loss, such as redundancy benefits for workers, revenue replacement grants for local governments, and tax incentives to corporations. Second are structural adjustment policies, such as training support for workers, R&D subsidies for corporations, and infrastructure investment for communities. Finally, comprehensive adaptive support policies promote an integrated approach to helping people and places adapt to new conditions by coordinating decarbonization planning, seeking reemployment of workers in cleaner industries, and developing new sources of local revenue and public goods provision.

Box 1. Just Transition

The BlueGreen Alliance (2015) explains Just Transition this way:

A transition to the clean energy economy requires the resources, policies, and priorities needed to retool our nation, create family-sustaining jobs, strengthen and grow no- and low-carbon sectors—including energy efficiency, renewable energy and commercial carbon capture and sequestration (CCS) applications—and ensure our communities are healthy and safe. ... The wealth of this nation, and indeed the global economy, has been built on the contributions of millions of workers in carbon-intensive industries. These workers should not be cast aside. Workers should not be forced to choose between a better environment and family supporting wages.

Past economic transitions have posed challenges similar to those presented by today's energy transition: new technologies that reshape industries always create winners and losers; liberalization and trade can undercut wages and eliminate jobs; regions that boom by specializing under one economic regime go bust under another. As workers, industries, and communities struggled, governments were prompted to intervene to provide transitional assistance. In the United Kingdom in particular, the transition away from coal is a case in point. Coal mining reached a peak employment of 1.1 million miners in 1913, then fell to a complete closure of major mines in 2015. This coal-sector transition was compounded by an economy-wide deindustrialization of the UK economy as other heavy industries, such as iron and steel manufacturing and shipbuilding, also declined.

The United Kingdom has tried a dizzying array of policies, at multiple levels of government, to address economic transitions. Although some policies provide lessons for future transitions, many lessons are the result of past failures. The response of the UK Government to momentous change in the coal sector was mostly reactive. Targeted policies to support economic transition were enacted only after the coalfields and industrial areas were beset by social and economic problems. The response was fragmented, creating an inconsistent set of regeneration policies. Funding was small, given the scale of national economic policy and the economic forces that were exacerbating inequality. Most of the coalfield regions remain poor, and regional inequality is among the highest in Europe (Martin et al. 2016).

Box 2. Regeneration

In many cases, the UK policy goal for economic transitions—including the energy transition—is regional regeneration, which the Government of Scotland defines as “the process of reversing the economic, physical and social decline of places.” The concept of regeneration is applied both to former coal regions and to other pockets of poverty and postindustrial “wastelands.” Regeneration comprises closing poverty gaps, remediating land, raising the local employment rate, and reinvigorating the economy. The UK concept of regeneration builds on Indices of Deprivation (Box 3) but is very similar to revitalization as discussed in the United States (Fitzgerald and Leigh 2002).

In some respects, the United Kingdom has played a leading role in climate change policy. Since 2001, it has imposed a climate change levy on top of the costs imposed by the European Union's Emissions Trading Scheme, thereby driving fossil fuels out of its national energy mix. The Climate Change Act of 2008 included the first legally binding mitigation target set by a country, and an amendment in 2019 committing the United Kingdom to net-zero by 2050 made it the first major economy to have such a goal. The Climate Change Act of 2008 also established the Climate Change Committee, a powerful independent statutory body that advises government, issues strategic reports, serves as a custodian of UK climate policy, and monitors progress toward the long-term objectives set in the act (Fitzgerald and Leigh 2002).

Internationally, the United Kingdom launched the Powering Past Coal Alliance in partnership with Canada in 2017 to support national and subnational governments, businesses, and organizations in the transition from unabated coal power generation to clean energy. The alliance has more than 100 members, all seeking to phase out the use of coal globally.

Those policies and initiatives, intended to help ensure a sustainable future for the world, have led to a shift in the UK economy, leaving many businesses, workers, and communities behind. In this report, we focus on workers and communities. We review both historical policies for the coalfields and distill lessons for future Just Transition policy from regional regeneration in the United Kingdom. However, the central lessons are to not rely on regional regeneration alone to redress shocks and to anticipate and prepare for disruptive transitions. We also review recent policy developments that suggest the way forward, toward an integrated, whole-government project focused on inclusive clean energy growth.

The remainder of this section describes our scope and our approach to assessing policy outcomes. Section 2 provides brief background on the UK institutional structure and climate policy. Section 3 reviews historical coal transitions in the broader context of regional regeneration policies in the United Kingdom. This discussion highlights the changing ideologies in government over the past 50 years, from a reliance on market-based mechanisms to an emphasis on localization. Section 4 assesses those policies and their outcomes. Section 5 discusses the recent evolution toward integrated policy approaches to fossil fuel transitions in the UK. Finally, Section 6 brings this experience together to offer recommendations for future policymaking.

1.1. Scope of This Report

This report examines policies that aim to support workers and regions dependent on the fossil fuel economy, as well as relevant policies for other industries and economic transitions. We include policies that provide social support, economic management, and stakeholder engagement.

Our coverage is far from complete, however. A comprehensive discussion of the role of the social welfare safety net is beyond the scope of this report. In many cases, we examine just one exemplary policy from a class. For example, government institutions for training workers are represented here by Skills Development Scotland, but there are similar skills centers and programs throughout the United Kingdom. Until recently, Further Education colleges were a focal point for skills development, and they continue to receive considerable government funding. In many cases, the policies we cover have provided funding for a long list of region-specific initiatives, which we do not discuss in detail.

Other dimensions also crucial to Just Transition lie beyond the scope of this report; in particular, fiscal reform to ensure that the cost of financing and incentivizing the transition does not disproportionately fall on lower-income groups and that everyone can afford to switch to low-carbon lifestyles.

1.2. Assessment Approach

The policies in this report can offer starting points for new policy design. Planning for future transitions should be based on the best available practices, drawn from

policies that have succeeded and are appropriate to each context. Administrative structures, funding arrangements, engagement processes, and auditing processes are all components of a successful policy: they support the policy's ability to produce beneficial outcomes, on which the policies should be evaluated.

Most of the policies we consider were not intended to deliver a Just Transition, and neither the level of justice nor the extent of transition have been criteria for their evaluation. However, several are specifically targeted at poor regions and groups. In some cases, that poverty is a historical consequence of a past transition from coal. The outcomes that such policies have been evaluated on—their ability to produce features of a successful economic revitalization—are directly applicable to policy evaluation seeking to identify successful Just Transition practices.

Two major challenges arise. First, since the intended outcomes, particularly jobs, new infrastructure, and economic growth, are the result of many drivers in a diverse economy, it is difficult to attribute benefits to the policies. Even where policies can identify direct benefits, such as the new jobs at a funded plant, the true benefits of a policy include indirect effects, such as the regional growth that accompanies new plants. Second, the full effects of policies can take decades to emerge. Even where immediate changes are observed, policies should be evaluated on the longevity of these benefits. Many of the recent policies considered here, however, have not been in place long enough for thorough analysis or observation of their full ramifications.

An important concept in the evaluation of regional development support is “additionality”: “the extent to which something happens as a result of an intervention that would not have occurred in the absence of the intervention” (English Partnerships 2008). In the United Kingdom, the evaluation of additionality is guided by the Additionality Guide, which highlights that additionality may emerge in terms of the scale, timing, area or group specifics, and quality of outcomes. Additionality is then evaluated with respect to a baseline reference case, which comprises both external and endogenous trends in the economy.

Many of the policies we consider have been the subject of National Audit Office reports, academic and institute analyses, or statutory evaluation processes designed into the policies. The following outcomes and metrics have been used across the policies considered here.

1.2.1. Policy Design

- **Beneficiaries:** Is the policy selective and successful in its targeting, to support those most in need?
- **Completion of the policy:** Were all allocated funds used and did the policy continue to function through the end of its intended duration?

1.2.2. Construction and Infrastructure Outcomes

- Acres remediated: Mining and industrial sites often make areas unsuitable for housing or for other forms of commerce. Remediation either returns the land to something approaching its original condition or decontaminates it and prepares it for other infrastructure.
- Homes and other real estate: Homes and commercial floorspace are a good proxy for the successful return of land to productive use.

1.2.3. Regional Aggregate Outcomes

- Jobs created: This includes both direct jobs created, if supported industries have expanded, and indirect jobs, if a region is generally made more prosperous. Identifying both direct and indirect jobs created can be challenging in a dynamic economy.
- Incomes and growth rates: Regions that have lost their economic engine can slide into a prolonged recession. Regional economic growth rates provide a high-level measure of the success of policies. The goal for many policies is to ensure convergence with UK-wide incomes.
- Joblessness: Total levels of joblessness may be a better metric for capturing the direct and indirect job creation.
- Deprivation: An important benchmark for economic growth is the Indices of Deprivation.

Box 3. Deprivation

The UK Government uses Indices of Deprivation to gauge relative standards of living across the country. “Deprivation” builds on the idea of multidimensional poverty (Alkire and Foster 2011) by acknowledging that factors beyond income affect individuals’ level of need.

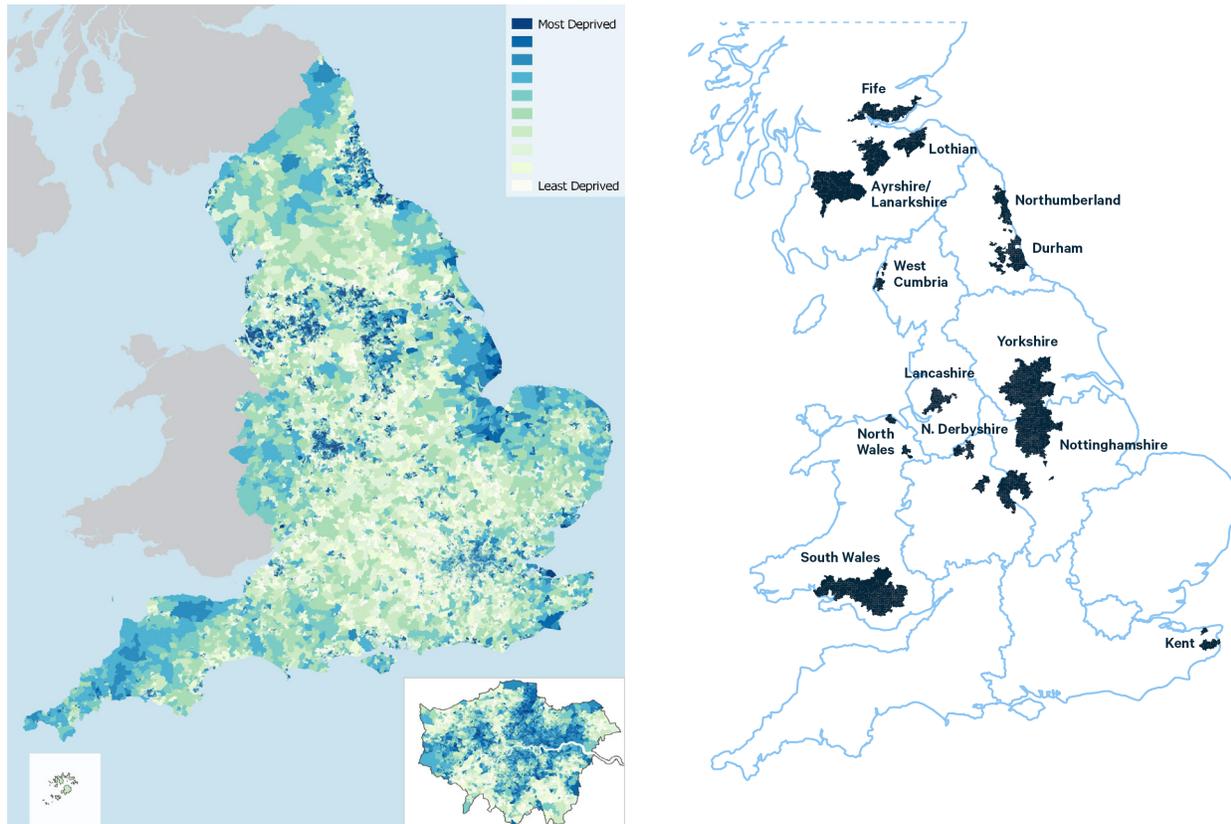
Since 2000, the Ministry of Housing, Communities, and Local Government has periodically ranked every locality in England for its level of deprivation. The resolution of the data is at the level of a neighborhood, called a lower-layer super output area (LSOA); there are 32,844 LSOAs in England. At present, the Indices of Deprivation do not apply to Scotland, Wales, or Northern Ireland.

The rankings draw on 39 indicators organized into seven categories (weighted): income (22.5 percent), employment (22.5 percent), education (13.5 percent), health (13.5 percent), crime (9.3 percent), barriers to housing and services (9.3 percent), and living environment (9.3 percent). The results is a relative rather than absolute score for each area: the rankings can indicate which of two localities faces a higher level of deprivation but do not reliably measure whether one has become more or less deprived over time, nor is the 100th-most deprived area necessarily twice as deprived as the 200th-most deprived.

The Indices of Deprivation are used to allocate means-tested welfare and support programs and to evaluate grant and loan applications. The data also serve as the evidence base for national and local development strategies. The indices are publicly available so that nonprofits and social enterprises can use them to target support as well .

Because England’s coalfield communities are commonly among its most deprived localities (Figure 1), several policies for coal communities rely on the Indices of Deprivation to assess need. For instance, some programs run by the Coalfields Regeneration Trust in England specify that support is available only to communities that fall within a certain decile of the index.

Figure 1. Correspondence between Deprivation and England's Coalfields



Source: (Left) Ministry of Housing, Communities & Local Government. (2020). The English Indices of Deprivation 2019 (IoD2019). (Right) Beatty, C., Fothergill, S., & Gore, A. (2019). The State of the Coalfields 2019: Economic and social conditions in the former coalfields of England, Scotland and Wales. Sheffield Hallam University.

1.2.4. Implicit Outcomes

- Private funding leveraged: Private funding, an input to policy projects, is also an important outcome, since it reveals a lower bound on the value of the policy. Figure 7 (Section 4.2) shows the wide range of private funding multipliers for some policies.
- Cost-effectiveness, or value-for-money: The price tag for revitalizing regions is incredibly uncertain, with some light-touch policies bringing about huge job growth and some decade-long approaches costing a huge amount and producing few results.

Many of the policies that we discuss were not narrowly focused on any of the above metrics but instead had broader social goals, such as crime reduction, community cohesion, and improved health outcomes. Tension exists between the evaluation of policies using clear metrics and the comprehensive consideration of these policies within their varied contexts.

2. Institutional Context

The United Kingdom is a unitary state made of four nations: England, Scotland, Wales, and Northern Ireland. Following the devolution acts of 1998 (Kerslake 2018), Scotland, Wales, and Northern Ireland gained executive and legislative powers over a range of policy areas, while English affairs continue to be decided by the UK-wide Westminster Parliament. Devolved policy areas differ for each nation (Kerslake 2018), but all nations' policy responsibilities include some areas that are core to a Just Transition: health, education, training and skills, environmental policy, and local governance and economic development. The UK Government and Parliament remain responsible for “reserved” policy matters, including macroeconomic policy, industrial strategy, and energy policy.

The UK Government drafts bills and develops policies; Parliament reviews, amends, and votes on bills, and monitors and oversees policy implementation. In the UK-wide government, the most important ministry for Just Transition is the Department for Business, Energy and Industrial Strategy, which is a merger of the former Department of Energy and Climate Change and the Department for Business, Industry and Skills. Other relevant ministries are the Departments of Education; Housing, Communities and Local Government; and to a lesser extent, Environment, Food and Rural Affairs.

Aside from the devolved authorities, there is no intermediate level of government between the central governments and local authorities (county and district councils). Economic development policies are generally most successful when they address issues endemic to an entire region, rather than just one city (Pike et al. 2015). But with governing authorities restricted to narrow jurisdictions, the structure forces awkward cooperation and balancing of authority.

Until Brexit, UK policy was developed within the EU framework, whereby EU institutions set many environmental and health standards, distributed funds for regional development, regulated subsidies for businesses, and funded collaborative research and development in strategic areas.

2.1. UK Political Economy

To understand the logic and the outcomes of individual policies, it is important to understand how the UK political economy is organized and its basic approach to transitions that affect local labor markets, communities, and regional economies. Critical elements include public finance, the approach to local economic development, and the welfare state.

One characteristic of the UK political economy is its high level of centralization. Indeed, the public finance system is one of the most centralized among OECD countries. Most tax revenues (95 percent) are collected by the central UK Government and are then redistributed. The devolved administrations are funded through a combination of local taxation and block grants from the UK Government. However, only local authorities have the power to raise revenue through a property tax. They also retain (but do

not set) 50 percent of business rates collected in their jurisdiction. The rest of their funding comes from government grants. Overall, they are responsible for spending only 20 percent of the total public budget (of which less than half is raised by the local authority), mostly in the areas of housing, environment, education, and public safety (European Committee of the Regions). This means that the central government controls budgets for areas such as skills, regeneration, housing, employment, and business support, which in other countries are often organized at a more local or regional level (Martin et al. 2016).

Another characteristic of the United Kingdom is its liberal market economy. Like the United States, it relies primarily on market forces to organize economic activity, rather than joint decisionmaking between the state and social actors, as in coordinated market economies like Germany. This reliance on markets has important consequences for a Just Transition, in particular because the United Kingdom has a high level of regional economic imbalance. In fact, it is one of the most regionally unequal economies in the European Union.¹ This pattern is longstanding but has been exacerbated over the past four decades with deindustrialization and the growth of the service sector (financial services in particular). The institutional organization described above is thought by some to be a fundamental obstacle to rectifying the regional imbalance.

Box 4. For Future Research: How Does Policy Context Affect Outcomes

A fuller understanding of the potential and limits of place-based regional policies, and their role in Just Transitions to low-carbon economies, requires a meta-analysis of cross-country policy evaluations, with a synthesis of how policy design and context interact to affect outcomes.

We have highlighted the potentially determining role of national-level economic institutions—those relating to education, access to finance, and regional flows of public funds. Understanding which national-level institutions may restrict a region's capacity to adapt is an important future research agenda for Just Transitions. Indeed, these national-level structures may powerfully constrain what transition assistance policies can achieve. In that case, understanding their effect can help us formulate more realistic aims for transition assistance policies, and realistic baselines against which to measure the success of targeted policies. More ambitiously, a Just Transition agenda calls for the reform of national-level institutions and policies that prevent inclusive green growth for transitioning regions.

Many of the local economic development policies described in this report can be understood as attempts to fix spatial imbalances and compensate for the absence of an intermediate level of governance without fundamentally reforming the system. One current approach is to develop strategic plans in concert with large metropolitan combined authorities (e.g., the Greater Manchester Combined Authority) and then devolve new policy responsibilities to these authorities, which are meant to push forward the strategic plan. These “devolution deals” are thus bespoke agreements between government and large combined authorities in an attempt to energize a bottom-up process of initiatives for local development coordinated with top-down funding and national objectives (such as the net-zero transition and the digital transition).

1 The UK has a 0.45 coefficient of variation in GDP per capita per NUTS2 regions in 2011, versus 0.23 in Germany and 0.19 in France.

As a liberal market economy, the United Kingdom has an unregulated labor market: wages are set by the market, not by collective bargaining agreements with unions, and employment is weakly protected. Workers' main resource to adapt to economic change is therefore what is offered by the welfare state. The UK welfare system is a means-tested, flat-rate benefit system at the subsistence level, aimed at poverty prevention. In this sense, although based on worker contributions, it is not a social insurance program (Bonoli 2013). Universal Credit is the core element of the United Kingdom's current welfare system for people of working age who are unemployed, on low income, or suffering from a disability. Introduced in 2013, it aims to streamline a range of previously available benefits and increase incentives to return to work. Universal Credit is administered by the Department for Work and Pensions and managed at the local level by job centers, although claimants are expected in most circumstances to make and manage their claims online.

The main approach to unemployment is to create incentives for individuals to reenter the labor market; a lower priority is given to investment in human capital and training (Bonoli 2013). And indeed, the data show higher spending on public employment services (which assist in job searches) than on training. Furthermore, the UK system shows a high level of the "activation" paradigm, aimed at creating strong incentives for returning to work. For example, claimants of Universal Credit must agree to a commitment with a designated work coach, which often includes writing a CV, looking for and applying for jobs, attending training courses, and accepting job offers even at a lower salary. If the agreed responsibilities are not met, sanctions to stop or reduce Universal Credit payment amounts are imposed.

The National Health Service is another pillar of the welfare system. It provides free health care at the point of use and therefore protects against any changes in health care access related to employment status, unlike in the United States.

Overall, the baseline unemployment and active labor market policies of the United Kingdom are not well fit for a Just Transition, given the low emphasis on training, the absence of wage insurance, and the cuts in social spending since the turn to austerity—the agenda for balancing budgets through sharp reductions in public spending—following the 2008 financial crisis. In these respects, the United Kingdom compares more closely with the United States than with many European countries.

2.2. Climate Policy Architecture

Passed into law in 2008, the United Kingdom's Climate Change Act was one of the first comprehensive climate laws to be adopted globally. It provides a whole-economy governance framework to guide action. Central features include a statutory long-term emissions target; statutory five-year carbon budgets²; frequent adaptation planning; an independent advisory body, the Committee on Climate Change; and mandatory progress monitoring and accountability.

2 Once a carbon budget has been adopted, the act mandates the responsible secretary of state to bring forward proposals and policies to meet the legislated target.

Targets set out in the act are United Kingdom-wide, and much of the implementation is assigned to the UK Government and Parliament, but there is also an explicit and significant role for the devolved administrations of Scotland, Wales, and Northern Ireland. (Similar provisions for councils, cities, and the English regions, however, are lacking.) Devolved administrations have powers to set climate targets and develop climate strategies. For example, Scotland and Wales subsequently passed their own laws and policies: the Climate Change (Scotland) Act 2009, replaced later by the Climate Change (Emission Reduction Targets) (Scotland) Act 2019, and the Wales and Welsh Assembly Government (2010) and Environment (Wales) Act 2016.

The Climate Change Act coordinates progress on many issues, including institutional and political change (Fankhauser et al. 2018). According to an evaluation in 2018, it has “transformed the way in which the political debate on climate change is conducted. The Act has created a routine of target setting, parliamentary scrutiny and reporting” (Fankhauser et al. 2018). Notably, in 2019, the statutory long-term emissions target was amended, committing the United Kingdom to achieving net-zero emissions by 2050 and improving on the previous 80 percent reduction target.

As highlighted by Fankhauser et al. (2018), rather than starting from a tax-based (social cost) approach or regulation (social protections) approach, the act is target oriented, giving a significant role for the state but also allowing for a role for markets.³ It is specific to climate change rather than embedded in a wider environmental context, and it requires a further package of policies to underpin sustainable development.

Monitoring and evaluation mechanisms built into the act include a mandate for the independent Committee on Climate Change to produce annual progress reports, detailing whether the government is on track to achieving its carbon budgets. Parliament debates these reports, and the government has a statutory obligation to respond. For each budgetary period, the UK Government must report to Parliament on policies and proposals to meet the carbon budgets. The Committee on Climate Change also analyzes policy performance over a budget period, with deadlines set out in the act. It advises the devolved administrations as well.

Perhaps the act’s most significant achievement, beyond building and maintaining consensus on climate change, has been driving the transition to a low-carbon economy through the transformation of the power sector over the past 12 years. This has helped the United Kingdom to meet its first two carbon budgets and to decouple greenhouse gas emissions from growth (Fankhauser et al. 2018). The independent reporting process carried out by the Committee on Climate Change has also established a robust empirical base that is widely accepted (Fankhauser et al. 2018).

However, the Climate Change Act has shortcomings, and a range of suggestions have been made to amend it and improve its implementation, including a statutory response time for carbon plans, clearer criteria for assessing compliance, and improved communications with the public (Fankhauser et al. 2018). Notably, increased political

3 See additional details at https://www.instituteforgovernment.org.uk/sites/default/files/climate_change_act.pdf.

will and buy-in across government departments is needed to ensure that the policy outcomes of the act are achieved. For example, the United Kingdom is not currently on track to meet its fourth and fifth carbon budgets⁴ (Stark et al. 2019).

4 These budgets were also set under the original 80 percent goal by 2050, and are thus too weak in themselves to meet net-zero.

3. History of Coal Phaseout and Coalfields Transition Policies

The United Kingdom is at once at the forefront of climate policy ambition and still reckoning with the mistakes of its 20th-century coal phaseout. In this section, we begin by explaining the history of coal's decline in the UK, followed by a discussion of the successive policy paradigms that have shaped the response to regional transitions over the years—in particular, the regions affected by deindustrialization and coal mine closures. In the latter half of this section we organize the UK policies designed to assist in this transition according to the stakeholder communities highlighted by Green and Gambhir (2020): workers, industry, and regions and communities.

3.1. The Phaseout of Coal

Coal in the United Kingdom was phased out in several stages. The 1960s saw a large wave of closures, with employment halving, from 607,000 to 290,000. In the early 1980s, coal mining directly employed more than a quarter of a million people in 211 mines in 17 coalfields⁵ in Wales, Scotland, and England. In many coalfields, coal mining was the primary industry. Together, these regions accounted for about 8 percent of Great Britain's population (Beatty and Fothergill 1996). Between 1984 and 1997, 141 mines closed, eliminating 170,000 jobs, as the Conservative government pursued a policy of withdrawing public support to unprofitable heavy industries, in particular steel and coal, by privatizing them and closing unprofitable sites. The power sector was also privatized and allowed to pursue gas power generation, which had become cheaper than coal. The drastic and abrupt policy of closure and workforce reduction was, according to historians, directed against the powerful coal miners' unions, which Prime Minister Margaret Thatcher wanted to weaken (Moore 2016). This transition was based on bitter conflict, marked by the coal strikes of 1984–1985.

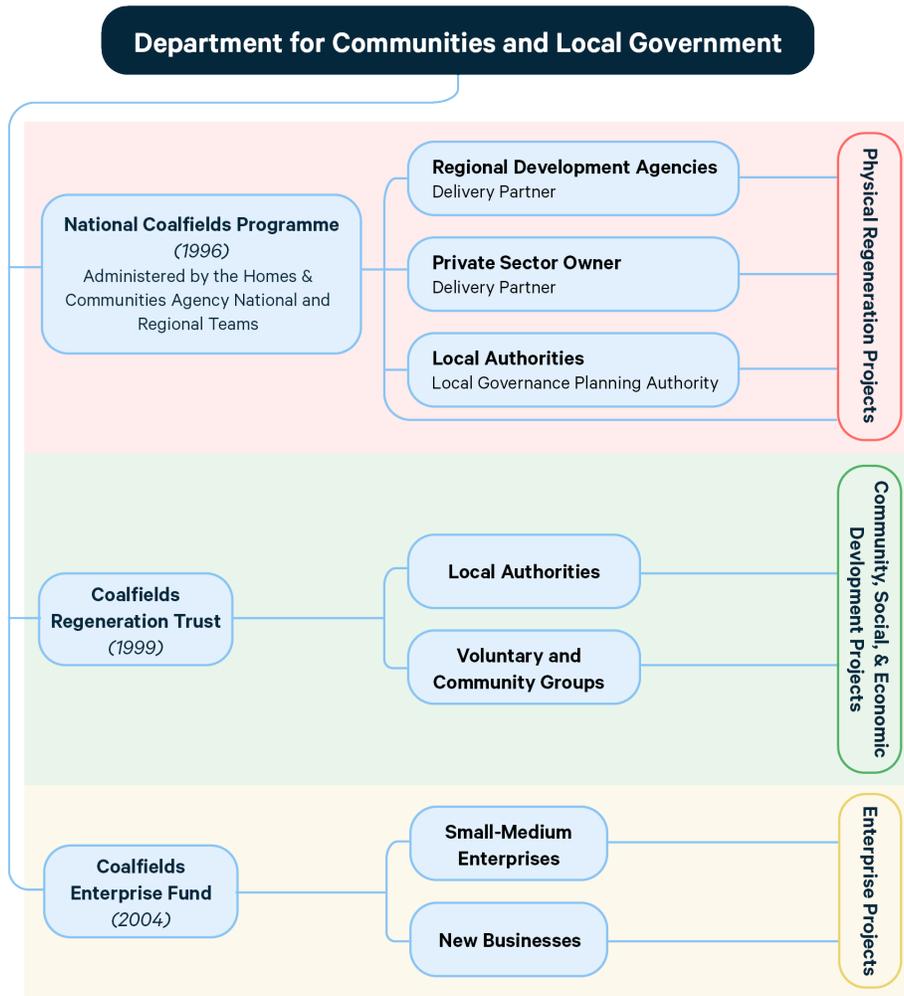
By 1997, jobs in the industry had dropped by 90 percent. The communities in and around coalfields saw a dramatic increase in joblessness, outmigration, and poverty. In many cases, the miners themselves did not experience the worst outcomes, as they had relatively strong prospects for finding jobs elsewhere or got long-term disability payments (Beatty et al. 2007). But the coal regions entered a long-term decline and developed a culture of low employment (Beatty and Fothergill 1996). Mines fell into disrepair, posing a threat to local ecosystems and public health. For 15 years, no specific policy was put in place to support these regions, although most of them qualified for funds from the European Union's cohesion policy (Section 3.6.4).

In 1998, at the initiative of the association of coal mining local authorities, the Coalfields Task Force Report was published. It recommended a package of three policies: the National Coalfields Programme (Section 3.6.1), the Coalfields Regeneration Trust

5 A coalfield is a set of contiguous districts in which at least 10 percent of the males in employment worked as a coal miner in 1981.

(Section 3.6.2), and the Coalfields Enterprise Fund. Figure 2 depicts their institutional organization.

Figure 2. Organizational Structure of the National Coalfields Programme, Coalfields Regeneration Trust, and Coalfields Enterprise Fund



Source: National Audit Office (2009).

The coalfields also benefited from more broadly targeted regional policies that have helped alleviate poverty, joblessness, and dereliction but generally have not been sufficient to restore the economic health of these regions (Figure 3; Beatty et al. 2007).

Figure 3. Former Coalfield Areas

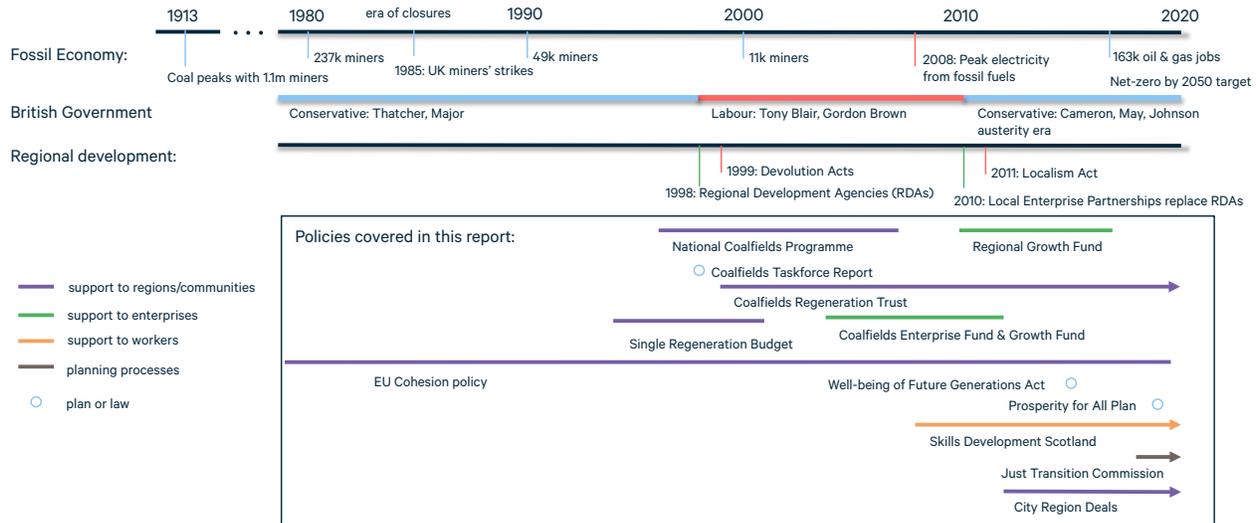


Source: Beatty et al. (2019).

3.2. Coal Policy Timeline

The timeline in Figure 4 places the economic and policy history of UK coal mining against the evolution of the fossil economy and the changes in governments and serves as an introduction to a more detailed description of the policies.

Figure 4. Timeline of Transition Policies



The policies named in Figure 4 are only a subset of all relevant policies. We chose them to represent, over time, the types of policies we deem relevant to Just Transition (Section 3.3) so that we can learn from the successive policy paradigms.

We identify four main phases of policy paradigms.

1980s: Narrow compensation for miners, market approach to regional development

The decade of the 1980s was marked by economic policy changes that fundamentally restructured the UK economy. The monetarist policies of the Thatcher government led to the growth of the financial services sector (in the South) alongside the decline of manufacturing and coal production (in the North) (Kitson and Michie 2014). This was accompanied by a large and persistent rise in unemployment and poverty. At the same time, Thatcher’s 1979 government greatly reduced regional assistance programs (business assistance to address regional imbalances), the main regional policy of the previous 50 years, and urban aid. The paradigm of this period was that economic growth and market-based solutions would solve social problems via a trickle-down process. Therefore, interventions in deprived regions were mostly economic, designed to promote market activity through private sector engagement, rather than social. Furthermore, the private sector was seen as an essential stakeholder for the delivery of policies; both local authorities and the third sector (nongovernmental organizations) were sidelined. For example, urban development corporations, set up to work on development projects, had board members appointed by central government and were composed of businesses and local authorities. They lacked democratic process and community involvement and focused on flagship projects, hard infrastructure targets, and property-led regeneration. With their narrow focus and lack of comprehensive urban planning, these corporations created “islands of renewal in seas of decay” (Imrie and Thomas 1993).

The 1980s was also the period of confrontational, forced closure of coal mines and other heavy industrial plants. At the time, most mines were publicly owned by British Coal Corporation (BCC, privatized in 1994). It and the government pursued a policy of providing narrowly targeted support for workers. In particular, if it expected a particular mine to close, the BCC would offer workers an option of early retirement or shifting to another mine. This eased to some extent the transition for directly affected workers.⁶ However, these closures were a major shock on the local labor market, causing a dramatic drop in participation in the labor force and an increase in outmigration. Indeed, about 10 percent of working-age males were moved into disability benefits, other long-term government schemes, or early retirement (Beatty and Fothergill 1996). This high level of incapacity pay has remained surprisingly stable, suggesting that rapid deindustrialization with no transition plan casts a long shadow (Beatty and Fothergill 1996).

1990–1997: Early Regeneration Programs

As poverty rates and regional disparities increased and voices rose to criticize the policies of the 1980s (Perchard 2013), regeneration policies were developed in the early 1990s to tackle regional deprivation. The regeneration paradigm reflected shifts in thinking about poverty globally in light of the failures of the Washington Consensus and the closer association between the United Kingdom and Europe following the Maastricht Treaty (Palley 2005).⁷ The most noteworthy policies were the City Challenge (started in 1991) and the Single Regeneration Budget (SRB, started in 1994; Section 3.6.3). Both emphasized the creation of partnerships of the private, public, and third sectors and promoted community engagement. Both also used competitive bidding, which was meant to identify new opportunities rather than focus only on needs. Importantly, the SRB promoted a more regional approach rather than highly localized and spatially defined interventions. This was facilitated by the creation of the government offices of the regions (representing central government in the regions) and regional development agencies.

During this period local authorities in the coalfields organized to advocate for the neglected regions, and in response, the Coalfields Task Force was established in 1997 to scope the situation and draft recommendations.

1997–2010: Regeneration and Area-Based Policies to Combat Social Exclusion

The New Labour government saw poverty and regional disparity as deeply structural, emerging from long-term exclusion from labor markets and multiple, spatially concentrated disadvantages. The new agenda was signaled by the creation of the Social Exclusion Unit in the Cabinet Office (CREW 2012). Local, regional, and regeneration policies—the so-called area-based policies—were considered critical to the broader strategy of combating poverty by tackling social and employment

6 Personal communication, S. Fothergill, Sheffield Hallam University, 09/16/2020.

7 The Washington Consensus (1989) recommended free-market policies for developing countries. The Maastricht Treaty (1992) set forth the basis for the European Union.

exclusion. This coincided with the move to devolve the powers of the centralized UK Government; the governments of Scotland, Wales, and North Ireland developed their own approaches. The result was diversity in policy experiments and governance structures.

The coalfields policies followed the 1998 recommendations of the Coalfields Task Force and were in line with this new agenda: they stressed the need to go beyond physical remediation and infrastructure and focus on the social issues affecting these regions.

2010–2020: Austerity and the Localist Approach

This period saw stark austerity policies and an attempt to have local authorities and local actors be responsible for creating local growth. The localist approach, in which government plays a strategic and supportive role but does not define or administer the regeneration agenda, appeared most strongly in England, with several noteworthy developments. First, the regional development agencies, which coordinated funding for economic development, and the government offices of the region were replaced by 38 local enterprise partnerships (LEPs) between civic and business leaders with a growth agenda and 24 enterprise zones. LEPs illustrate the extent to which the central government backed away from taking responsibility for regional development: no legal framework was created to delineate the partnerships' goals, powers, or administration, and until recently they had no dedicated public funding. Second, devolution deals and city-region deals were created, in which local actors articulate a long-term growth strategy and negotiate commitments from the UK Government to support implementation and the extent of devolved powers.

Also in this decade, the notion of Just Transitions was articulated by the International Labour Organization (ILO 2015). In the United Kingdom, new policies, plans, and commissions are starting to define a proactive approach to prepare local economies and workers for decarbonization and the opportunities presented by green growth policies.

3.3. Types of Policy Response

Green and Gambhir (2020) identify different approaches to managing just transitions, ranging from narrowly targeted and reactive responses to transition problems to broad-spectrum, proactive approaches. The range of policies applied to the coal transition is much narrower, due to the lack of anticipatory policies to help workers, industries, or communities prepare for the transition. However, workers did benefit from a baseline of support available through the basic infrastructure of the welfare state. As the challenges faced by workers became regional challenges, and as the solution to regional challenges were sought through industry support, new approaches were introduced. At least a decade after the crises of mine closing, these new policies aimed to support enterprise development, coalfield communities, and regional economies.

As can be seen in Table 2, the funding available for these policies differs radically, from

the small-scale funding available through the Coalfields Funds (£2.3 million per year) to the Single Regeneration Budget, which brought together £713 million per year from a suite of preceding programs. Although their scale differs, each policy has played an important role in the government’s attempts to regenerate the coalfields, and each provides lessons for future policy.

Table 1. Financial and Regional Scale of Major Policies

Policy	Years	Region	Annual funds (millions)
Single Regeneration Budget	1994–2001	Deprived areas	£713
National Coalfields Programme	1996–2017	107 sites	£37 ^a
Coalfields Funds (Enterprise and Growth)	2004–2014	Eligible coalfield wards	£2.3 ^b
Regional Growth Fund	2010–2017	Assisted areas	£425
City Region Deals (England, waves 1-2)	2012–present	28 large cities	£127 ^c
City Region Deals (Scotland)	2014–present	6 regions	£104 ^d
City Region Deals (Wales)	2016–present	2 regions	£62 ^e

Notes:

a. £387 was allocated at the inception of the National Coalfields Programme, for 1996–2006. The program was later extended to 2017 without additional funding, but we report annual funds only through 2006.

b. The Coalfields Enterprise Fund existed from 2004 to 2014, with total public funding of £20 million, and the Coalfields Growth Fund existed from 2009 to 2014 with £5 million in public funds.

c. Wave 1 deals were allocated £2.3 billion over 30 years; wave 2 deals have been allocated up to £1.5 billion.

d. Scottish deals have spans of 10 to 20 years. We have taken the average over 20 years, including both Scottish and UK government commitments. Only deals for Glasgow, Aberdeen, Inverness and Highland, and Edinburgh and South East Scotland are included. Data from Audit Scotland (2020).

e. Includes the Welsh and UK government contributions to the Cardiff and Swansea Bay deals, over the 20-year commitment specified for the Cardiff deal. Data from Ward (2020).

3.4. Support for Workers

Workers are the most directly affected group in the transition away from fossil fuels. However, in the historical transition away from coal, the government’s policies were focused on privatization and accelerating the closure of uncompetitive mines; they showed little support for workers. The main tool for supporting workers, aside from the welfare state, was the British Coal Enterprise (BCE), a subsidiary of the state-owned British Coal Company, tasked with replacing the jobs lost in the coalfields. Here we

review what happened to workers at the time of the historical transition; in Section 5.1, we describe current support for workers in the low-carbon transition.

The BCE was set up in 1984 to help create jobs by supporting small and medium-sized enterprises (SMEs) and to assist miners in job search and training. Its main activities were to operate a loan scheme for small businesses and to provide job search support for miners, with some retraining programs. When a pit was scheduled to close, BCE would set up “job shops” on the site. Fothergill and Guy (1994) estimated that the BCE managed to replace about one in 14 jobs lost in the coalfields.

Overall, qualitative evidence suggests that the BCE did not meet the needs of ex-miners and that their assistance was instead taken up by others in the coalfield communities with higher educational backgrounds. In 2004, Murray et al. (2005) interviewed just over 40 men who had worked in seven of the South Yorkshire coal fields and whose families had been involved in mining for generations. The interviews, focused on workers’ experience with reemployment and retraining, revealed the obstacles that laid-off workers faced. First, 60 percent received no retraining or help with job search and applications. Among workers who received career advice and retraining opportunities, most reported a negative experience. Career advisers seldom asked workers what jobs they would like to retrain for but instead seemed to think that ex-coal miners, especially pit workers, were too uneducated and unadaptable to be retrained. Workers had to be on benefit schemes for six months before being allowed access to retraining. By that time, they usually had developed a pessimistic outlook and low confidence. Although they clearly had vocational skills in various trades, as well as management skills due to the intense teamwork required in coal mining, they were not encouraged to identify transferable skills. More than 50 percent considered self-employment as tradesmen but were not offered any mentoring to start their own business, as the BCE deemed many people incapable of succeeding in a self-employment project. The retraining opportunities offered to managers were more appealing than those proposed to pit workers. Many participants reported that they saw the BCE and other reemployment agencies as “playing the numbers game.”

By the 2000s, former coal workers had become very pessimistic. They saw no real options for the future. In fact, they viewed many jobs as involving insufficient “graft” (British slang for hard work) that they could be proud of, and no policy had been put in place to attract new heavy industry. Instead, a very large number went on disability benefits, which excluded them permanently from being able to participate in programs to reenter the job market (Fieldhouse and Hollywood 1999).

This experience shows that support has to be a process that empowers workers, giving them real options in line with their personal goals and values, access to training for skills in demand, and backed by a serious industrial policy that creates new jobs.

3.5. Support for Industry

Private companies are essential partners in any Just Transition because of the need to reorient the economic activities of the region and create new sources of employment in

the private sector. Broadly, support for industry in the service of regional regeneration falls into three categories. First, existing industries can get tax incentives and other government support to reduce their costs and make them more profitable in their current markets, and thereby retain jobs. This approach can be expensive—in Spain, it cost an estimated €250,000 per job saved (Caldecott et al. 2017)—because the incentives need to be maintained every year and do not address the underlying drivers behind the transition. Second, existing companies can get support for research and development, retraining, or other internal support for structural adjustment. This can lessen the burden of change on communities but requires commitment by companies to both the region and the transition. Third, financing support can be made available to new companies starting in the region. Like all new ventures, this approach carries considerable risk and requires a careful and adaptive selection of companies to help fund.

A review of business interventions developed by Scottish Enterprise, a regional development agency, between 2001 and 2006 found that the cost of additional jobs generated varied across both intervention types and particular interventions (McPherson and McDonald 2010). Interventions to support business innovation cost £7,000 to £143,000 per job created. The cost per job of supporting start-ups was much lower, £5,000 to £18,000. The wide variation suggests that the regional context and business specifics are significant factors.

We review two regionally targeted approaches to industry support in the United Kingdom: the Coalfields Funds and the Regional Growth Fund.

3.5.1. Coalfields Funds

The 1998 Coalfields Task Force found a dearth of SMEs in coalfield communities. The report showed that coal mining towns had traditionally relied on one or several large corporations (typically coal companies and heavy industry) to provide jobs; with the decline of coals, these communities lacked other businesses, as well as an investment ecosystem to foster new ones. The Coalfields Task Force saw a need for a fund that could support the growth of businesses and encourage entrepreneurship in these regions. The Coalfields Enterprise Fund (CEF, 2004–2014) and later the Coalfields Growth Fund (2009–2014) were created to address that need.

Both funds were venture capital initiatives targeted at early-stage ventures in coal regions. They provided funding in return for an ownership share in the new businesses. The Coalfields Funds also provided indirect benefits by advising applicants on business plans, suggesting other funders, and connecting them with legal and recruitment experts. Any business intending to open considerable operations within the coalfields could apply. The combined government funding for the two programs was only £25 million, but all investments were matched with private funds. This drove the funds to be highly selective, and by 2009, the CEF had invested only £8 million. One benefit of this selectivity was high returns per investment. As of 2009, the CEF had supported 26 companies and generated 482 direct jobs, with an average cost to the state per job of £16,500 (National Audit Office 2009). For comparison, the

regional development agencies, the England-wide institutional structure for regional regeneration until 2010, generated 178,000 additional jobs between 2002 and 2007 at a cost of £60,000 per job. The CEF has also been effective in attracting private investment, with investments matched at an average rate of 355 percent.

However, a need remained for small loans (less than £100k) . One of the CEF's goals was to engender an entrepreneurial culture in the coalfield regions and help shift their economies away from dependence on a few large firms. This goal remains out of reach despite a 35 percent increase in businesses per capita in coalfield regions (Coalfield Regeneration Review Board 2010), where private enterprise per capita is 35 percent lower than the UK average and growth in this metric is also lower than the UK average (Beatty et al. 2019). This reflects the small scale of the Coal Funds and the large scale of the regional economic challenge. Lack of measurable objectives or evaluation of the region's specific capital needs has also undermined the programs (Chadwick et al. 2013; National Audit Office 2009).

3.5.2. Regional Growth Fund

The Regional Growth Fund (RGF), formally outlined in the 2010 report “Local Growth: Realising Every Place’s Potential,” was a main component of the shift toward localism (UK Department for Business, Innovation and Skills 2010). The report identified two emerging problems. First, economic growth was occurring primarily in urban centers, leaving a dearth of jobs, revenue, and investment in more sparsely populated areas. Second, the UK Government’s ongoing austerity measures had caused the loss of many public sector jobs, impairing regions that had historically depended on the public sector for income and employment.

The report called for the UK Government to use its financial resources to foster businesses in places where investment had previously been lacking, essentially “rebalancing” economic growth. As part of the European Union, however, the government was restricted from supporting industry with “state aid” that could give the United Kingdom an unfair economic advantage, with the exception of designated areas of underdevelopment.

Box 5. Assisted Areas and State Aid

It is unlawful for any EU member state (including the United Kingdom, prior to January 1, 2021) to provide companies with a competitive advantage in the European market through state aid, defined as “an advantage in any form whatsoever conferred on a selective basis to undertakings by national public authorities” (European Commission 2019). In other words, national governments cannot selectively give a leg up to companies or organizations. The prohibition is designed to maintain an even playing field for companies in the European market and prevent member states from giving their companies competitive advantages (Government of Scotland 2020).

Enforcement of the rule falls to the European Commission, which has investigative authority over member states’ governments. All economic aid measures being considered must obtain prior approval. A measure that is implemented and then found to be in violation is subject to fund recovery (EC 2019).

The state aid rules contain an important exemption, however. “Regional aid” guidelines states to support small to medium-sized enterprises (SMEs) in “less economically advantaged places that would benefit from additional support for development” (UK Department for Business, Innovation and Skills 2014). In the United Kingdom, such areas are known as “assisted areas” (Figure 5) and are eligible to receive regional aid in compliance with EC rules. The Regional Growth Fund, Regional Selective Assistance, Welsh Government Business Finance, and Selective Financial Assistance programs take advantage of this designation to assist SMEs in regions where businesses are struggling to grow (UK Department for Business, Innovation and Skills 2014). Three designations of assisted areas determine the extent of aid. Coalfield communities face some of the highest barriers to SME growth in the country and thus are prominently represented among the assisted areas.

The RGF provided no-interest loans to initiatives in these areas to boost the economy and, in particular, to create and safeguard jobs. Bids are evaluated based on project location, need, job creation, value for money, and state aid compliance. The support of local enterprise partnerships has been central to the development of successful bids to the RGF (Cox et al. 2014).

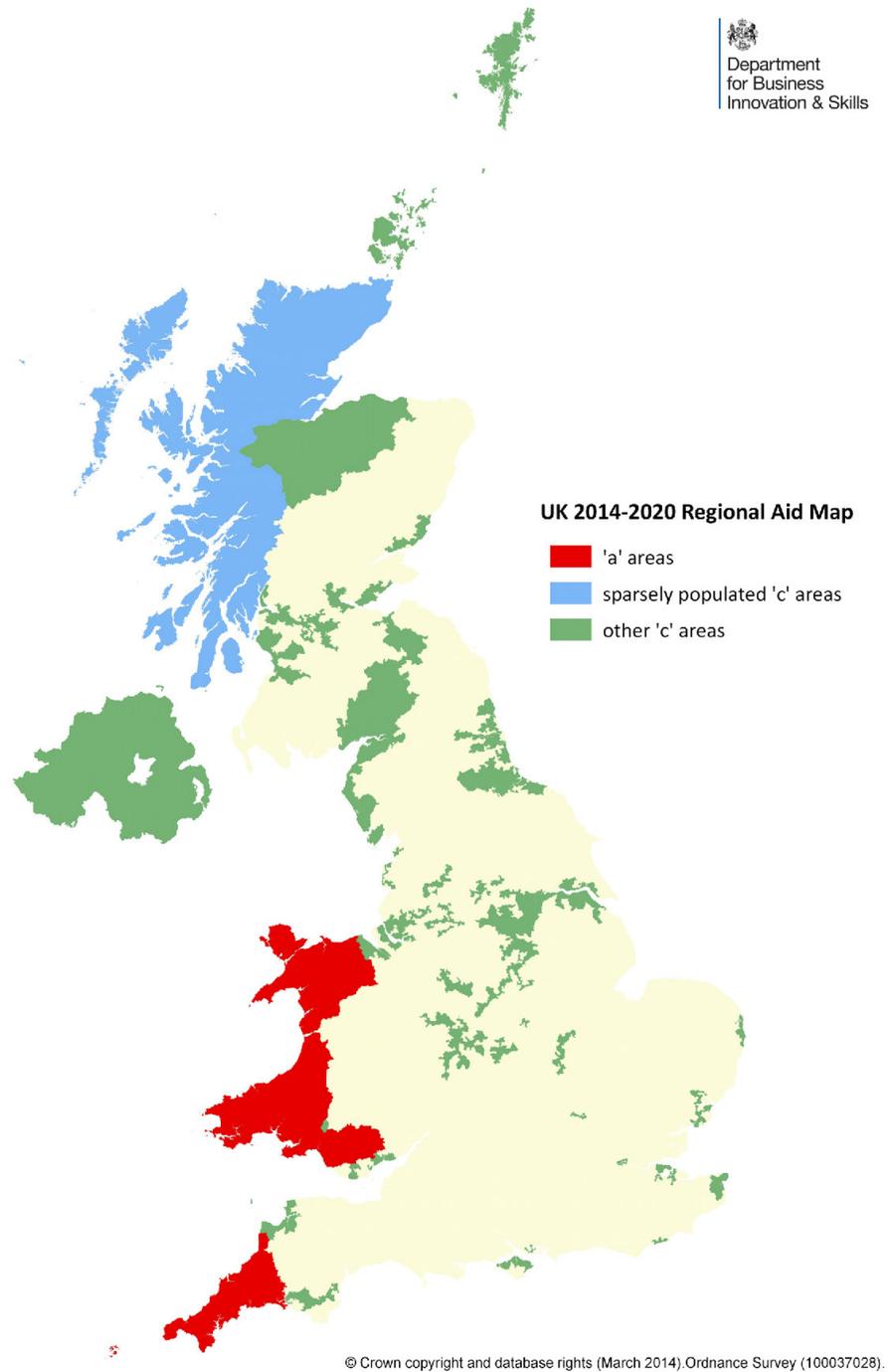
The RGF has been the most successful of the policies reviewed here at bringing in private funds. By 2014, when £2.6 billion had been committed, it was matched with £14.4 billion in private funds. It also has one of the lowest costs per job, having created or safeguarded 141,000 jobs by 2015 for £1.5 billion, an average cost of £11,000 per job (UK Government 2015).

However, this represents a very select group of projects, with demonstrated private sector buy-in and high-value propositions, said to be possible only through the support of the RGF. Total RGF investment was below desired levels because of the lack of available funds, with the result that some regions did not receive the full available support (UK Government 2015).

3.6. Support for Regions and Communities

Coal was once a core economic driver, with at least 10 percent of the male working population in coalfield regions employed in coal mining (Beatty et al. 2019). The loss of coal jobs undermined the economic foundation for a wide range of sectors, including suppliers, transportation, food services, and housing. Studying economic transitions in the United States, Acemoglu et al. (2016) find that the total effect on employment is 5.9 times the initial loss of jobs—consequences that emerge both along the supply chain

Figure 5. UK Assisted Areas



Source: Beatty et al. (2019).

network and geographically. Unlike workers in the directly affected industries, these unemployed individuals often have no way to protest the transition, and they receive no compensatory severance pay.

The resulting regional deprivation requires regional solutions. New transportation links, remediated land, and other supporting infrastructure may be needed to make the regions attractive to new economic activity. These investments provide public goods that support all economic activity. Although support for individual industries also contributes to regional regeneration, regionwide planning initiatives are also needed to discover a new economic engine to replace the one that was lost.

Four policies aimed at regenerating regions—the National Coalfields Programme, the Coalfields Regeneration Trust, the Single Regeneration Budget, and the EU Cohesion Policy—can be classified as structural adjustment assistance, but the scales at which they operate are quite different.

3.6.1. National Coalfields Programme

The National Coalfields Programme (NCP), one of the three programs targeted at the coalfields, started at the end of the 1990s, more than a decade and a half after the beginning of pit closures (the others were the Coalfields Regeneration Trust, Section 3.6.2, and the Coalfields Enterprise Fund, Section 3.5.1). The UK Government committed a total of £1.1 billion for the three programs, with the goal of reversing rampant unemployment and low attractiveness of the coalfield areas.

The objective of the NCP was to remediate abandoned and contaminated coal mining sites and develop them into housing and commercial space. It eventually addressed 107 sites across seven regions of the United Kingdom. Projects were funded by public-private partnerships, with a total public investment of £880 million and private investment exceeding £1 billion (Industrial Communities Alliance 2020). The NCP remediated some of the most highly contaminated sites in Europe, including many with poor economic potential, and with a limited public budget. The financial approach was to bring all sites under public ownership so that sites with higher economic potential could subsidize those with lower potential. The NCP would fund the remediation and partner with private investors and local developers to find a new purpose for the site. Subsequent land sales and loan and equipment payments gave the program revenue to reinvest in other sites.

The NCP eventually succeeded in remediating all abandoned coal sites. The program took 20 years—double the time originally envisioned. Many sites were redeveloped as warehouses, and the number of jobs in warehousing in former coalfield areas is now about equal to the number of coal jobs in the early 1980s (Beatty et al. 2019). One success case is the Sheffield advanced manufacturing park, a technological hub that has attracted other companies and encouraged investment in skills and innovation, thus diversifying the economy. However, the program as a whole was poorly monitored. For example, there are no records of who was recruited into new jobs, and remediation costs and redevelopment costs were lumped together. Thus it is difficult to estimate how cost-effective the program has been, and the extent to which it benefited people in the coalfields.

3.6.2. Coalfields Regeneration Trust

The Coalfields Regeneration Trust (CRT) was set up as a charity in England, Scotland, and Wales, endowed with a governmental fund, to provide social support to communities. It was mandated to provide grants to social enterprises, community service organizations, workforce development programs, and youth engagement programs in regions affected by the decline of coal. This organization was intended to be community-based, highly embedded, and responsive to community needs.

The CRT is small, with a total current full-time workforce of 40 people. In Scotland and Wales, it is funded year to year, receiving £2.5 million from each government. In England, it previously received £29.55 million every three years but is now required to be self-financing. It has established four small subsidiaries, which generate a yearly revenue of about £4 million. Over the 20 years since its founding, the CRT has received roughly £300 million in public funding in England, Scotland, and Wales, which it has disbursed in small grants (ranging from £10,000 to £300,000, with an average of £20,000) to social enterprises, community organizations, local training agencies, community-based renewable energy infrastructure, and other initiatives.

Although the CRT has a small budget, its program portfolio shows that it is versatile and nimble, responding to needs on the ground with highly tailored programs. Surveys of CRT funding recipients indicate that 97 percent of respondents considered the CRT's collaboration to have been crucial to their enterprise. In addition, the CRT helped many obtain additional funding from other sources. Stakeholders overwhelmingly consider it responsive and supportive. In contrast with the BCE (Section 3.4), its particular strengths are its flexibility to address the particular needs of local stakeholders, its provision of practical advice in line with the objectives of grant seekers, and its ability to move quickly to fill a gap in funding from other sources and keep an initiative going. It is seen by many as the most efficient grant-distributing organization, with good understanding of the field and of the sectors that need support (IWA 2011).

Auditors and observers have criticized the NCP, CRT, and CEF for not developing a joint strategy and coordinated approach, with consequent disconnects between NCP development plans and the training offered by the CRT. In many cases, sites were sold to new employers with no program in place to inform the local community and recruit ex-miners. As a result, some sites have very low occupancy rates, and at others, a majority of jobs went to people outside the coalfield areas (National Audit Office 2009).

3.6.3. Single Regeneration Budget

The Single Regeneration Budget (SRB) was one of the most extensive area-based initiatives in England. From 1993 to 2002, it broadly targeted projects that would make places more attractive for people to live and for businesses to invest in.

The SRB distributed a total of £5.7 billion to 1,028 projects over six rounds, in amounts from £500,000 to £100 million, usually for projects at neighborhood scale (Rhodes et

al. 2007). The coalfields' share was on the order of 12 to 14 percent, or £600 million to £800 million. Total spending on these projects is estimated at £26 billion, with additional funding coming from local authorities, learning and skills councils, the private sector, and the European Union.

Competitive bidding became an important aspect of public policy in the mid-1990s. Instead of allocating funds based on need, competitive bidding was meant to reward innovative projects and push local actors to take responsibility to identify their own priorities. SRB recipients had to be local partnerships involving public, private, and third-sector actors. The goal was to coordinate different sectors, leverage private finance, achieve economies of scale, and build local capacity for more coordinated economic governance. However, the selection process was very centralized and opaque to local actors (Gibbons et al. 2020).

One objective was to increase local employment. End-of-program estimates were that SRB projects created at least 600,000 jobs, helped 400,000 people find jobs, and supported the start of 87,000 new businesses (Rhodes et al. 2003). That number of jobs created is in line with the more econometrically rigorous evaluation by Gibbons et al. (2020), who estimate that the 18 percent of funds dedicated to developing commercial floor space increased workplace employment by about 200,000, at a cost of about £40,000 per job. However, Gibbons et al. (2020) note that no information was collected on whether these jobs benefited residents. In fact, the projects made no difference to local employment rates—that is, the jobs did not go to the residents of the targeted area.

The SRB and other area-based initiatives may have been more successful in improving social outcomes than economic ones. Indeed, even if area-based regeneration projects do not succeed in reversing broader economic dynamics, they can do a lot to lessen the effects of poverty by ameliorating the experience of living in a deprived area—by improving housing, community safety, the physical environment, and educational opportunities (Crisp et al. 2015). End-of-program estimates suggest that as a result of SRB projects, more than 5 million pupils benefited, more than 300,000 homes were built or renovated, 34,000 acres of land were recovered for open space or development, and more than 100,000 community groups received support.

From the point of view of governance, the SRB required strong accountability from the local partners to the central government, but very little to the local community: it held few public meetings and published few accounts. It therefore does not shine as an example of successful decentralization (Hall 2000).

3.6.4. EU Cohesion Policy

The EU Cohesion Policy, a large policy framework aimed at regional economic development, has its roots in the 1970s. The policy consists of five European structural and investment funds, of which two, the European Regional Development Fund and the European Social Fund, are the most relevant in the UK context. One third of the EU budget is dedicated to this policy. The budgets are allocated for a long period—seven

years. The most recent funding period was 2014–2020, with a total budget of €639 billion.

The policy is spatially targeted: the beneficiaries are regions that are either “less developed regions,” with a GDP per capita less than 75 percent of the EU average, or “transition regions,” with GDP per capita between 75 and 90 percent of the EU average. The United Kingdom had 11 transition regions and two less developed regions (Cornwall and the Isles of Scilly, and West Wales and the Valleys), out of 31 regions. Through this formula, the United Kingdom received €10.8 billion in 2014–2020, and Wales (including the Welsh coalfields) received the most funding of any UK region.

The funds are administered through a combination of top-down and bottom-up processes. The European Commission has set out general strategic objectives and guidelines, with top priorities including innovation and research, the digital agenda, support for SMEs, and the low-carbon economy. National governments then distribute the funds to the targeted regions. In England, they are distributed to local enterprise partnerships, which draft a strategy for how the funds are to be used, taking into account the EU priorities (with a great deal of flexibility). These strategic plans are then negotiated with both the national government and the European Commission. The commission also publishes guidelines for monitoring and evaluation of both individual projects and the combined results within larger programs.

Given its scale, ambition, and duration, the EU Cohesion Policy is one of the best-studied regional programs in the world, with more than 50 academic papers analyzing its effects. Evaluation is at the center of the policy design, each programming period undergoing significant reform in light of lessons learned. At the EU level there is general consensus that the net effect is to boost regional growth at least in the short term, but the effects are highly dependent on national and regional contexts (Rodríguez-Pose and Garcilazo 2015). In the United Kingdom, regions with higher proportions of EU structural funds experienced higher growth rates over 1994–2013 (Rodríguez-Pose and Garcilazo 2015). Detailed data on the use of funds has allowed researchers to study the effect of policy design on outcomes. Rodríguez-Pose and Garcilazo (2015) found that regional programs that concentrated funds in a small number of areas were far less successful, and those that neglected regional weaknesses (by focusing on comparative advantage instead) were also less successful. Ferrara et al. (2017) evaluated the causal relationship between funding and outcomes in targeted regions. They found that innovation funds clearly boosted growth in innovation (measured as patent applications per million inhabitants) and catching up with the mean level in noneligible regions. The effects of transport funds on road accessibility were also positive but much more heterogeneous.

4. Policy Outcomes and Lessons

We have reviewed several regional policies that were either fully or partially targeted at the former coalfields. It is now instructive to evaluate how the coalfields have developed since those policies were put in place.

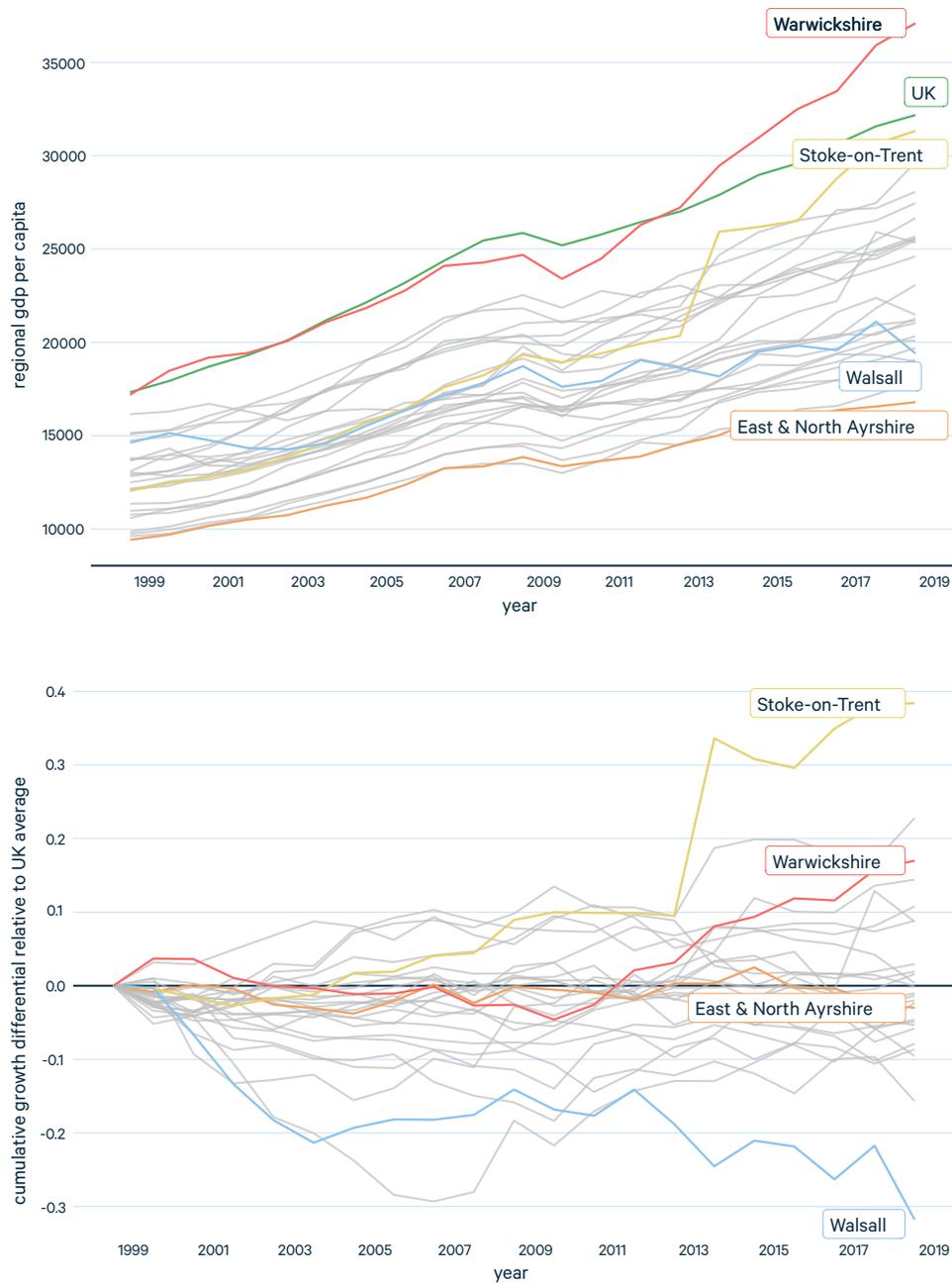
4.1. Outcomes

Figure 6 gives an overview of the varied economic fates of the coalfields since 1998. As we see in the upper panel, all coalfields except for Warwickshire started off poorer than the UK average and are today still poorer than the UK average. Thus, transition support policies have not succeeded in helping these regions converge with the national average. The lower panel provides a more nuanced view, showing that some coalfield regions have fared better than others. It depicts the cumulative difference in the growth rate of each coalfield relative to the national average. Lines above 0 indicate that a region has grown faster than the national average. Stoke-on-Trent, for example, grew 1 percent faster than the national average, putting it on a path to convergence with the average. About half of the regions are characterized by lines hovering around 0, indicating that they have grown at the same rate as the nation as a whole and therefore maintain the same relative disadvantage now as in 1998; East and North Ayrshire, a very poor region, is an example. Lines below 0 indicate growth slower than the national average, as is the case for Walsall.

Since many regeneration initiatives focused on stimulating local economic activities, we start by assessing changes in the local economies of the coalfields. The number of jobs in the coalfields stands at 55 per 100 residents of working age (falling as low as 42 in South Wales), compared with 73 for the United Kingdom on average. Warehousing has been a growth sector, now employing almost as many people as coal mining did in the early 1980s. However, the stock of businesses in the coalfields (relative to the population), as well as the business formation rate, is on average only two-thirds of the national average. Furthermore, levels of qualification are low because of selective outmigration. Even though school performance in the coalfields is in line with national averages, many coalfield residents commute out of the coalfields to work. It is estimated that the real rate of unemployment is 7.5 percent, compared with 5.7 percent on average (Beatty and Fothergill 2019).

These economic difficulties bring enduring social hardships. Average life expectancy in the coalfields is a year less than the national average, and the incidence of self-reported ill health is about 12 percent more than the national average. The proportion of working-age adults receiving disability benefits is about 50 percent more than the national average. According to Indices of Deprivation, 42 percent of neighborhoods in the coalfields fall into the 30 percent most-deprived places in England. Compounding this difficult situation, funding for the social sector and local authorities has dramatically declined since 2010 because of the government's austerity policies. Incomplete evidence suggests that the cuts have been regressive (falling more heavily on more-deprived areas), and many voluntary organizations have entirely lost their

Figure 6. Regional Trends in Economic Activity in Former Coalfield Regions



Notes: The upper panel shows regional GDP per capita (in 2018£); the lower panel shows the cumulative differential in growth rate relative to the UK average.

Source: Office for National Statistics, <https://www.ons.gov.uk/economy/grossdomesticproductgdp/bulletins/regionaleconomicactivitybygrossdomesticproductuk/1998to2018>.

government funding. Charities and nonprofits in the coalfields are much more likely than the average to report a shortfall in funding. Welfare reform (cuts in benefits) has also had a slightly regressive effect, with expected cuts of funding of as much as £800 per working-age adult per year in many districts, including former coalfields (Beatty and Fothergill 2018).

4.2. Timing of Support

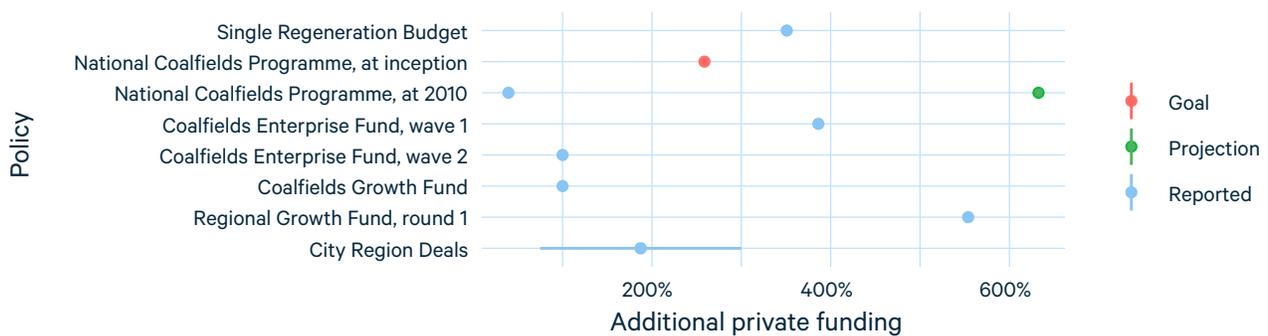
Overall, the transition policies directed at the coalfields came very late—about 15 years after pit closures. The funds were modest and were distributed through a plethora of programs, in a fairly fragmented approach. Communities have had to repeatedly bid for a variety of projects, making it difficult to build a coherent long-term strategy.

With the exception of the EU Cohesion Policy, the policies reviewed in Section 3 did not prescribe evaluation. The data on program implementation were unavailable or difficult to access, and data gathering to track outcomes was insufficient. Given the complexity of the policies and the problems they address, it is essential to learn from each policy experiment. An evaluation plan must therefore be an inherent part of policy design moving forward.

Given the lack of direct policy evaluation, the ability of these policies to attract private funds can be used as an indication of their perceived promise or success.

Results are summarized in Figure 7. Some policies drew very high levels of private funds, with the Single Regeneration Budget, Coalfields Enterprise Fund, and Regional Growth Fund all securing additional private funding that exceeded 300 percent of their public funds. These policies were aimed at regions and communities and at industries. We also include the City Region deals program (Section 5.1.2), which secures private funds equal to about 200 percent of its public funding.

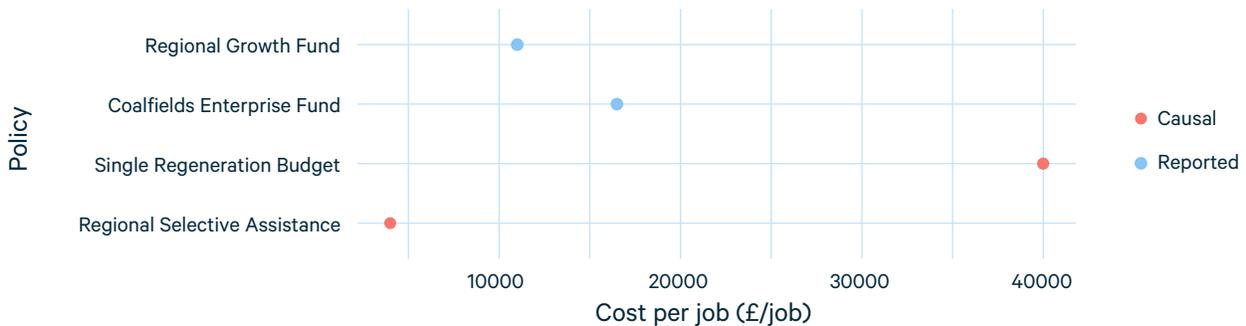
Figure 7. Additional Private Funding for Selected Policies



Another metric for policy evaluation is the cost per job created. In Figure 8 “reported” refers to the cost per job created as stated in end-of-project reports. These are not causal estimates. We can thus expect that they are underestimates of the real cost per job truly created by the policy. We were able to include two causal estimates,

one for the SRB (Gibbons et al. 2020) and one for the Regional Selective Assistance (Criscuolo et al. 2019), a program not reviewed here that was a place-based local development fund active following coal mine closures. The figure indicates that some policies apparently created jobs at a reasonable cost. However, caution is warranted: Gibbons et al. (2020) find that the jobs created by the SRB went not to local residents but to workers outside the targeted zone who commuted in. Generally, insufficient data were collected to evaluate whether transition policies truly helped the intended beneficiaries.

Figure 8. Cost per Job Created for Selected Transition Policies



4.3. Scale of Programs

Many regional policies display the following pattern: they increase jobs created or local GDP yet fail to fully reverse the decline or put the local economy on a path to catch up with the national economy. In the coalfields, regeneration has supported the development of new businesses, which have absorbed a significant part of the available workforce. Nevertheless, as was shown in Figure 6 (Section 4.1), most of these regions continue to lag. For the EU Cohesion Policy, most studies find a positive effect on growth, yet this effect is sometimes short-term or insufficient to meet the objective of regional convergence.

This pattern may be due to an insufficient scale of funding (Table 2, Section 3.3). The Ruhr region in Germany is a good example of a more ambitious and more successful policy, where €38 billion was spent over a period of 14 years to diversify and increase the attractiveness of the region. For example, 22 new universities were opened to attract companies seeking a skilled labor force and opportunities to build networks with universities and suppliers (Oei et al. 2020).

Hence, the scale of investments matters and has to be adequate given the extent of the disparities. Regional funding in the United Kingdom seems insufficient to address the scale of spatial disparities (although this is difficult to fully assess because of the fragmentation of policies and the myriad small funds).

Another way to explain the pattern of micro-success and macro-failure is that the effects of the basic economic institutions of a country may overpower the benefits of regional policies. Let us briefly consider the potential effect of public finance, education, and financial institutions as examples.

Most of central government spending is “spatially blind”—that is, it does not specifically target localities based on need (as do regional policies). Yet this spending ultimately flows to localities (individual universities, companies, schools, hospitals) and is therefore not spatially neutral. In fact, it could be “counterregional” in the sense of exacerbating regional disparities and dwarfing the effect of regional policy funds. For example, procurement policy for the defense industry is very geographically concentrated in the United Kingdom (as in the United States) and plays an important role in the local economy (Crump and Archer 1993). The implication for Just Transition policies is that the regional flows of all public funds should be evaluated in light of the transition challenge, to check for opportunities to redress historical patterns of regional inequality in public funding.

The institutions governing the provision of education are also a building block in a region’s capacity to adapt. To what extent are quality schools and universities distributed across regions? In the United States, where 44 percent of public school funding comes from local sources (and 34 percent from local property taxes), access to education is extremely unequal and perpetuates inequality (Chetty and Friedman 2011). When regions suffer from a downturn or structural change, their capacity to fund schools diminishes, along with their capacity to invest in the human capital that can allow them to transition. It is hard to imagine how a regional policy can reverse the consequences flowing from the spatial inequalities built into one of the most fundamental institutions of the economy.

Although the United Kingdom’s schooling system is centrally funded, higher education is marked by the famous “golden triangle” of well-endowed and well-funded universities in Cambridge, Oxford, and London. Redirecting funds to universities in other regions is a major component of the “leveling up” agenda of the government (rebalancing the economy of the rest of England relative to that of the wealthy South-East). In Germany, universities and research institutes (the Max Planck network for basic research and the Fraunhofer network for applied and engineering research) are extensively distributed across the federation and well connected with local industry. Here the implication for Just Transitions is to consider opportunities to significantly improve equality of educational resources across members of society, as a building block for more targeted policies.

Access to finance is also shaped by national-level institutions and has enabling or constraining effects on local growth (Klagge and Martin 2005). In the United Kingdom, financial organizations are heavily concentrated in the South-East and provide lending to industry and in particular small businesses. SMEs outside the South-East have difficulty raising capital. Financial policies directly affect the incentives of banks to lend to small businesses, which in turn affects a region’s response to downturns (Hackney 2018). In the United States, supplementary lending by the Small Business Administration can support regional transitions. Similarly, KfW in Germany helps ensure

more regional evenness in the allocation of funding to SMEs. When these institutions are lacking, as in the United Kingdom, policymakers try to fill the gap with loan funds, but this seems less effective than building an institution that can provide reliable, professional, long-term service.

Those examples show that the capacity of regions to adapt to structural change is shaped by national-level economic institutions and policies whose effect may far outweigh regional policies.

4.4. Lessons from UK Transition Policies

The policy analyses and the evaluation literature allow us to extract some best practices and recommendations for the types of policies reviewed in this report. To strengthen our confidence in such recommendations, future policies must allow for ex post evaluation by having clear objectives, detailed metrics, and open data.

4.4.1. Support for Workers

- Training provisions need to empower people rather than seek to slot them in positions based on a priori conceptions of their potential, as did the training programs for ex-coal miners in the mid-1980s and 1990s (Murray et al. 2005).
- Reliance on welfare policies (early retirement, unemployment, and disability payments) does not give workers the tools they need to develop new economic activity.

4.4.2. Support for Enterprises

- Supporting businesses through loans or cash in exchange for equity has been successful in the case of the Coalfields Funds, which cost-effectively generated jobs and allowed new businesses to become self-sustaining.
- Tax incentives to attract businesses can be very costly, since they do not address the root causes of the regional challenges (Caldecott et al. 2017).
- In some regions, the pool of worthy projects for enterprise funds is small because entrepreneurial culture is weak. This can be remedied by complementary investment in skills and enterprise grants sustained over a long period.
- Businesses in proximate industries are more likely to be a good fit for the region and remain because they can draw on the region's existing skill set and networks of suppliers. Enlarging businesses' local networks by supporting partnerships with universities and research centers can help form a cluster that strengthens local industry (Oei et al. 2020).

4.4.3. Support for Regions

- As illustrated by the EU Cohesion Policy, public funding for regional economic development should address all the binding constraints of a region (weaknesses such as transport infrastructure, R&D, human resources, business investment, tourism, and entrepreneurial culture). In contrast, concentrated investment and investment in areas of strength do not generate the same level of returns (Di Cataldo and Monastiriotis 2018).
- Transport links increase flexibility in how a community adapts, but not all communities enjoy strong links—as illustrated by the diversity of economic outcomes across the different coalfields (Gore et al. 2007).
- Supporting community cohesion and the development of soft skills in the community, as does the Coalfields Regeneration Trust, helps people win grants and speak the language of bureaucrats and employers.
- Specific policies are needed to address the problems of those suffering from acute deprivation. Local economic development policies, even when effective at stimulating local growth, do not automatically lead to a reduction in poverty, partly because poverty reduction involves a different set of policy actors with different interests and expertise.
- Typical regional growth funds (e.g., EU Cohesion Policy) do not show decreasing returns. This means there is scope for increasing funding for local economic development policy to reverse very high levels of regional inequality.
- To promote local growth, programs need to define targeted objectives, have a long horizon, and combine bottom-up and top-down planning. One-off programs (a common policy design in the United Kingdom) are hard to coordinate with and to evaluate.
- Local economic growth requires coordination between many stakeholders (to align infrastructure needs, business support, skill development). Policies should build processes for coordination at multiple scales, experimentation at multiple scales, and on-going stakeholder engagement (Crescenzi and Giua 2016).
- Building pre- and post-evaluation plans into policies is crucial for informing policy design. Having clear targets and metrics, as well as reporting responsibilities and accessible records, allows policies to be evaluated and funding to be directed to the greatest-value projects.
- Metrics should be useful. The deprivation index and maps of transition regions (in this case, coalfields) have helped target effort. The number of jobs directly created by a policy can be compared with changes in the total joblessness rate. When acres are remediated and returned to productive use, the resulting growth in industrial space and its new uses can be tracked. The ability of public policy to attract matching private funds is also a marker of success, as determined by the market.

4.5. Comprehensive Planning

One insight from the decline of coal economy in the United Kingdom is that mining job losses have ripple effects on the rest of the labor market. Miners themselves were often able to find employment until retirement, obtain early retirement, or receive severance payments. However, without a corresponding expansion of other work, women in manufacturing and workers in other sectors, supporting industries, and the wider community saw losses of work and income (Aragón et al. 2018). These losses can last generations as weaknesses in earnings, qualifications, and occupational mix reproduce themselves over time (Beatty and Fothergill 2020).

The United Kingdom has painfully learned from experience that narrow compensation policies, such as severance pay and disability benefits, foster a culture of joblessness that contributes to an area's long-term deprivation. These policies do not prepare the workers for new jobs or help create new jobs, so their opportunity cost to the economy is considerable. Thus, Just Transition policies should actively support the growth of new industries and qualifications instead of merely compensating redundant workers.

The UK coal transition has also shown that renewal of infrastructure is a vital but insufficient ingredient for adaptation to disruption. Coalfields have been reclaimed, albeit slowly, and are now used for housing, warehousing, business floorspace, or wildlife refuges. Transport infrastructure is also critical, and often underestimated, for giving people access to labor markets and options for adaptation. Indeed, the less connected coalfields have generally fared worse over the subsequent decades (Gore et al. 2007). Nonetheless, infrastructure alone will not revitalize a region. The structural sources of poverty need to be considered comprehensively. This is more likely to happen if affected areas organize and advocate for themselves, as did the UK coalfields by forming the Coalfield Communities Campaign (now the Industrial Communities Campaign). These advocates played an essential role in verifying that central policies responded to their needs.

Despite the eventual development of more comprehensive regeneration policies, many coalfields have continued to struggle. This experience shows that it is very difficult for a regional economy to catch up, once it has fallen behind. Regeneration policies are fighting against a dynamic process in which young people, jobs, and entrepreneurial culture have started gravitating elsewhere and social networks, as well as human capital and health, have weakened. Thus, advance planning in regions exposed to transition risk is extremely important.

Advance planning is particularly important for protecting workers' rights. As jobs are lost in a labor market, the bargaining rights of workers weaken, and so do wages and workplace conditions. To avoid this, industrial policy can be leveraged to stimulate the creation of new jobs before old jobs are lost, and labor standards, such as a right to access skills qualifications (which does not exist in the United Kingdom) would help empower workers.

Long-term planning can make a significant difference in the outcomes of Just Transition interventions. Coal regions in the United Kingdom and elsewhere have

taken generations to transition, and the most effective policies (e.g., EU Cohesion Policy) have operated on long time horizons (Caldecott et al. 2017). Transitions involve restructuring the drivers of an economy, including rebalancing the complex network of supporting industries and trade relationships. Workers need to train and to find ways to redirect their years of experience. As a result, proactive policymaking—preparing for transitions long before any jobs are lost—is essential. With this additional time, communities can be engaged to understand their choices and plan a shared future, rather than being powerless in an abrupt, uncontrolled change.

Having learned the lessons the hard way, UK policymakers and stakeholders are now developing new policies and initiatives for future transitions. Section 5 describes these policies and the associated advance planning.

5. Energy Transition Today

The United Kingdom is undergoing technological, economic, geopolitical, and lifestyle transitions at a time when it must also transition away from a carbon-intensive economy. The UK Climate Change Act (Section 2.3) is the centerpiece of the policy and planning process for reaching net-zero, with regular reports that cover sectoral impacts, costs, and near-term and long-term goals.

The transition to a net-zero carbon economy will cause multiple types of occupational shifts, some of which will create new clusters of job loss, which is what concerns us here. Over coming decades, job losses are expected in the North Sea from a reduction in the oil and gas sector, which employs 30,600 workers and is estimated to indirectly support about 260,000 workers (OGUK 2019). Fluctuations in the price of oil and gas over recent years have already affected the North Sea industry, which has relatively high costs of production compared with other oil- and gas-producing areas. Other clusters of job loss could arise from shifts away from livestock farming and internal combustion engine manufacturing.

These shifts are relatively small compared with the scale of net-zero employment shifts in other countries. Yet, in the United Kingdom as elsewhere, they play out in the context of other job transitions and need to be considered conjointly with those other trends. First, adjustment to a post-Covid, post-Brexit context will have long-term economic costs (Bourquin et al. 2020). Second, automation is slowly but deeply transforming occupational profiles and occupational demand. PWC (2018) anticipates that automation could affect up to 30 percent of UK jobs by the early 2030s, jobs mostly held by those already more exposed to economic insecurity (e.g., people with lower qualifications and in low-skilled positions). Meanwhile, skill-shortage vacancies—openings that employers have difficulty filling because applicants lack relevant skills, qualifications, or experience—accounted for 22 percent of all vacancies in the United Kingdom in 2019–2020,⁸ with a large proportion involving STEM skills (Prospects and HECSU 2020). This indicates there is still progress to be made in expanding the availability of skills needed by the economy for the digital and net-zero transition.

The history of policymaking to address challenges in the former coal regions—beginning with market-based solutions, then addressing region-wide issues, and finally witnessing the rise of localism policies—offers important lessons for the broader Just Transition. We can learn from past failures and develop new planning processes that engage with all relevant stakeholders and thereby have a better chance of ensuring equity and success.

The new, proactive planning processes fall under the “comprehensive adaptive support” classification from Green and Gambhir (2020)—approaches that have the “greatest potential for just, equitable and smooth transition outcomes, but are

8 Although these were reported across 163 professional occupations, sectors with the highest skills shortages for graduates included nursing, programmers and software development professionals, and human resources and industrial relations officers.

costlier and more complex to implement.” The complexity comes from the demands to integrate the needs of many actors, plan comprehensively for the future, and develop clear statutory goals while maintaining adaptive flexibility.

In this section, we look at three partial models for more integrated approaches. Although these policies do not achieve all of the aspects needed to ensure a Just Transition, each highlights a particular aspect. Unlike most of the policies reviewed thus far, which tend to be more fragmented and piecemeal, these new policies attempt to plan for a Just Transition by providing a long-term pathway and encouraging coordination among actors.

5.1. Current Policies to Support Workers – A Sampling

5.1.1. Skills Development Scotland

The proactive and accessible services of Skills Development Scotland (SDS) stand in contrast to the poor performance of retraining programs in past coal transitions. SDS is a centralized public agency for employment and workforce development, created in April 2008 by merging existing skills- and employment-related programs. It is organized as a limited liability company whose board members are appointed by Scottish ministers to represent a variety of backgrounds in the public and private sectors. SDS receives overall guidance from ministers but otherwise operates independently from the Scottish Government with a budget of about £230 million per year, or around £42 per year per capita (Government of Scotland 2021).

SDS’s structure is worth highlighting as relevant to Just Transitions. First, SDS offers a wide range of services to support individuals facing redundancy. It also has several programs that facilitate access to employment: Scottish Apprenticeships, for training in industry-specific skills, and programs to support those with a more uncertain path to employment (e.g., Employability Fund, Introduction to Work Place Skills, National Third Sector Fund). Finally, Skills Planning aims to anticipate skills demand, adjust training programs, and offer career guidance.

Within SDS, the Partnership Action for Continuing Employment (PACE) serves as a consolidated package of redundancy services, including help understanding tax responsibilities, writing CVs and cover letters, coping with stress, and accessing unemployment benefits, plus career management workshops, information about training and funding sources, and help with numeracy and literacy. PACE is evaluated via a biennial survey that asks clients to assess the usefulness of its services. Data indicate that PACE is successful. As many as 40 percent of people facing redundancies use PACE. Of these, 25 percent underwent training and 80 percent had found employment within a year. Nearly half believe that the services influenced their employment outcome (PACE 2020).

SDS is also notable for its embeddedness within the Scottish economy. It maintains at least 30 “High Street” SDS centers in cities and towns, which serve as one-stop-shops for all career services, including direct access to one of the 18 PACE local teams throughout Scotland. SDS delivers its services in collaboration with other organizations (local governments, universities, Scottish Enterprises, Sector Skills Councils, Industry Advisory Boards, Community Planning Partnerships, the UK Commission for Employment and Skills) to avoid duplication and ensure a coordinated approach. Collaboration with industry is close as well. For example, new apprenticeships are provided based on the advice of the Scottish Apprenticeship Advisory Board, after approval by the Apprenticeship Approval Group, a separate employer-led group that meets monthly to discuss new apprenticeships (Hyslop 2009).

This socioeconomic embeddedness is also reflected by the regional specificity of SDS’s services. For example, SDS regularly publishes regional skills assessments of demand, supply, and mismatches. This approach has enabled SDS to quickly work with local Growth deal partners (Section 5.1.2) to adapt government services to respond to Covid-19 labor market disruptions, in particular via the National Transition Training Fund, which aims to help people acquire skills for the net-zero transition during the pandemic. As another example, ahead of the closure of a factory, a task force typically forms to plan ahead: SDS works with unions, the city council, and Scottish Enterprises (an agency supporting businesses) to identify new business and employment opportunities to ease the transition.

5.2. Current Policies to Facilitate Integrated Planning – A Sampling

5.2.1. City Region and Growth Deals

The emergence of City Region and Growth Deals is rapidly reshaping the relationship between national and local governments. City Region deals are “bespoke packages of funding and decision-making powers negotiated between central government and local authorities and/or local enterprise partnerships and other local bodies” (Ward 2020). These additional powers include the ability to decide on the spending of public funds and support business and economic growth. The transition from regional development to the city-region focus reflects a movement in UK governance to site decisionmaking power at the local level (Wills 2016) while reducing the cost of local governance (Pugalis and Townsend 2012).

Box 6. Local Enterprise Partnerships

Local enterprise partnerships (LEPs) epitomize the policy reversal that occurred after the new Coalition government came into power. Prior to this shift, regional development agencies projected central government authority and facilitated implementation of programs and disbursement of funds in the regions. They were dissolved, and in their stead, the government invited local authorities and businesses to submit bids to form new bottom-up partnerships. To receive approval, the proposed local enterprise partnership had to gain support from businesses and local governments, represent a “natural economic geographic zone,” and offer a vision for economic development.

LEPs are nonstatutory bodies: neither their role nor their structure is defined in legislation. Ideally, the boards consist of representatives from businesses, local governments, educational institutions, and social enterprises. Their role is to advocate for local economic interests while coordinating the vision and projects for local economic development: outlining regional investment priorities, coordinating proposals for accessing funds, providing unemployment services, weighing in on national planning policies and local business regulation.

Created after the 2008 financial crisis and the turn to austerity, LEPs were initially expected to be self-funded. Now, their operational expenses are largely government funded. LEPs are the central coordinating institution for several regional schemes: they channel EU structural funds, they can bid for the Regional Growth Fund and the Local Growth Fund (the successor to the SRB), and they are core parties in City Region deals.

In their early phase, with very limited resources, LEPs had no choice but to forge relationships and negotiate their role with existing actors. They had to take the lead in coordinating local actors and establishing links to the central government. Some LEPs pulled ahead and built capacity, taking advantage of the flexibility of this bottom-up process; others did not. A problematic aspect of LEPs is that they have no clear channel of accountability.

Across multiple funding rounds, regions were invited to submit proposals for their future economic transition. Selected bids engaged in negotiation with municipal, national, and UK-wide governments through a process that also involved private industry and civil society. Across the first two waves of funding in England and the first waves of funding in Scotland, Wales, and Northern Ireland, £7.5 billion has been committed from the UK-wide and national governments over the next 30 years.

The goals of the deals vary widely, with additional specific directions at the subcity level, but cover workers, industry, and regions. Growth deals have been used to support job training through the establishment of local skills building, workforce development, and apprenticeship programs. They have supported industries with local venture capital funds and broadband technology diffusion. They have included provisions for new housing development and low-carbon infrastructure development to regenerate economically depressed areas.

Assessing the City Region deals is a challenge (Jones et al. 2017). Accountability is unclear, with responsibility resting completely with neither the local nor the central government (House of Commons Committee of Public Accounts 2016). This lack of clear responsibility opens the door to conflicts between local and national authorities and creates potential for the national government to “slough off its various crises” onto the cities.

5.2.2. Scotland: Just Transition Commission

The Just Transition Commission (JTC), an initiative of the Scottish Government, aims to engage academia, government, labor unions, and firms to think through the challenges of transitioning to a low-carbon economy. The Scottish Parliament created the commission when it passed the Climate Change Bill in September 2018, a wide-ranging and ambitious policy that, among other things, sets a legally binding net-zero greenhouse gas emissions target for 2045. The bill also requires that the Scottish Government, in meeting this target, take Just Transition principles into account: the implementation plan for meeting the emissions targets must support sustainable jobs, support low-carbon infrastructure, incorporate worker-focused NGO recommendations, create fair and high-value work, and address inequality and poverty (Scottish Parliament 2019).

The JTC was tasked with advising the Scottish ministers on how to apply the International Labour Organization's Just Transition principles to its climate change planning. It was directed to operate for two years. During this time, it would gather evidence on Scotland's Just Transition and engage with stakeholders, including workers, community leaders, industry leaders, businesses, and NGOs. It was specifically asked to focus on how a Just Transition could support young people entering the labor market (JTC 2020).

The principles embodied by the JTC reinforce existing informal practices of stakeholder-based local planning in Scotland. Two recent examples are the Tullis Russell–Fife Taskforce and the Longannet Taskforce. The Tullis Russell–Fife Taskforce was instituted to prepare for the closure of a paper mill. Engaging with workers and local industry, the task force performed an extensive skills audit to determine how to match up workers and employers, allowing workers to market their skills in new sectors (Courier and Advertiser 2016). The Longannet Taskforce was created to plan for the closure of Scotland's last coal-fired power plant. The process took 3.5 years, highlighting the need for long-term planning,⁹ but 99 percent of the plant's interested workers found new jobs. The Longannet Taskforce also held two supply-chain events for stakeholders to discuss plans, which may explain why very few of the 185 companies in the supply chain reported problems.

The recommendations of the JTC's first interim report were the result of a year-long collaborative process that involved a range of stakeholders.¹⁰ In the process, the JTC has emerged as a new space where the energy industry, trade unions, and environmental organizations can interact (Mercier 2020). However, the scope of the JTC falls far short of its original proposal by the Just Transition Partnership: the commission was a short-term body with no statutory basis, rather than a long-term oversight organization with associated green investment funding.

9 Personal communication, Andrew Sim, Lead Officer, Local Development Plan, Fife Council.

10 Personal communication, Gregor Auld, Scottish Government, 30/09/2020.

5.2.3. Wales: Well-Being of Future Generations

The Well-Being of Future Generations Act of 2015 is a comprehensive legislative approach to strengthening action on sustainable development in Wales. A consultation process (“The Wales We Want” campaign) gathered input from almost 7,000 Welsh citizens and groups, and in response, ministers shifted the focus of the bill toward human well-being. It includes the establishment of the world’s first statutory, independent Commissioner for Future Generations, whose role is to ensure that future generations are able to meet their needs.

The act outlines seven goals for sustainable development, including a sustainably growing economy that provides gainful employment to all who seek it, healthy ecosystems that are able to withstand economic growth and climate change, improved mental and physical well-being, greater equality, and more cohesive communities. The act has an unusually wide scope: it links many areas of social well-being and justice, including future generations, equality, employment, community cohesiveness, cultural identity, and global responsibility. It also imposes a clear statutory process by which the Welsh Government must anticipate and plan for future transitions, focusing on fairness and quality of life.

The act requires public bodies to pursue the economic, social, environmental, and cultural well-being of Wales in a way that accords with the sustainable development principle (Wales National Assembly 2015). All Welsh public bodies must set regular well-being objectives that promote the act’s goals and evaluate new policies and resource uses for their effect on future generations’ well-being. The Welsh National Assembly is required to publish an annual “Well-Being Report” assessing progress on well-being indicators, as well as an annual “Future Trends Report” predicting shifts in the economic, social, cultural, and environmental well-being of Wales. The Welsh auditor general may examine public bodies’ compliance in pursuing sustainable development.

The Commissioner for Future Generations oversees planning, reporting, and coordination among the government bodies covered under the act (Wales National Assembly 2015). This includes a responsibility to advocate on behalf of future generations, assist government bodies with sustainable development, review public bodies’ success in promoting sustainable development, and facilitate collaboration between public bodies to achieve sustainable development goals.

5.2.4. Wales: Prosperity for All

“Prosperity for All: A Low Carbon Wales,” 2019, lays out the plans for Wales to meet its 2016–2020 carbon budget and 2020 interim emissions target, as well as to set it up for success in its 2021–2025 carbon budget (Welsh Government 2019). The plan presents a cross-sectoral strategy for transitioning to a low-carbon economy, with 76 policies and 24 program proposals. The policies are organized by sector and cover power, buildings, transport, industry, land use, agriculture, waste management, and fluorinated gases. Each sector’s policies are paired with or incorporate measures to advance

welfare and equity in the economic transition (Welsh Government 2019).

The plan was developed in accordance with the guidance of the Well-Being of Future Generations Act, with a focus on integration and problem prevention. In constructing the plan, ministers took a collaborative approach: working with the Commissioner for Future Generations, convening the Ministerial Task and Finish Group to make strategic decisions regarding cross-sectoral work, and soliciting public input. They also developed a well-being matrix tool to assess how the policies interact with the goals set out in the 2015 act (Welsh Government 2019).

The implementation of the plan falls to government ministries. Some policies, like power sector reforms and land use regulations, fall clearly under a specific purview; others lend themselves to cross-departmental collaboration. The Programme Board set up in advance of the plan's publication is charged with coordinating across governmental agencies (Welsh Government 2019).

Prosperity for All includes policies that support Just Transitions. One is the creation of a “climate just advisory group” to study how government policies affect vulnerable communities and communities that rely on carbon-intensive industries. The group will comprise representatives of heavy industries and citizen groups and advise the Welsh Government on delivering employment opportunities and tackling inequalities in the process of decarbonization. Other notable policies include three regional partnerships that will review decarbonization-related workforce skills gaps in their regions and provide retraining services; and the development of incentives to prevent price-sensitive businesses from offshoring their operations.

5.3. Preliminary Assessment of New Approaches

The lessons from past industrial and coal transitions have borne fruit. New approaches, particularly in Scotland and Wales, are more comprehensive and proactive. Here we offer interim assessments.

5.3.1. Support for Workers

Skills Development Scotland offers a clear improvement over the British Coal Enterprise: stakeholders are happy with its model. It offers all services related to skills development in a unified agency that is well coordinated with business associations, educational institutions, and policymakers. At the same time, it is locally embedded, with a presence in all towns. Its one-stop-shop experience for prospective users makes information on skills demand, training supply, and returns to training widely accessible.

The institutions have also become more proactive. Skill audits, used to plan for localized disruptions, aim to match workers who will soon need new jobs with opportunities in new sectors and industries. These efforts are considered effective when planning for a closure: few workers are left without a clear next step after a multistakeholder engagement processes with skill audits at their center.

5.3.2. Integrated Planning Strategies

The new policies aim at integrated planning for a Just Transition. A defining feature of integrated planning policies is that they seek to align all relevant policy domains in a coordinated way. For example, Prosperity for All (Wales) is a cross-sectoral plan with in-built processes to coordinate across multiple agencies. It features a Just Transition advisory group to systematically examine how proposed policies affect more vulnerable groups. Similarly, the Just Transition Commission (Scotland) engages with the finance industry and the Scottish Investment Bank to coordinate financial policy with the goals of a net-zero Just Transition.

A shared vision for the future is used to develop integrated policies. For example, the Well-Being for Future Generations Act (Wales) was developed after extensive citizen consultation to set broad objectives for the nation, linking future generations, equality, community cohesiveness, cultural identity, ecosystem health, and employment in the same governance structure. It guides reporting by public bodies and the development of subsequent policies. This act created an institutional framework that coordinated work among ministries in developing Prosperity for All.

Integrated policies should draw on existing experience and multistakeholder engagement processes, and involve underrepresented groups (as in the case of the Just Transition Commission and the Well-Being act). In particular, Scotland's Just Transition Commission emerged from government-community-industry planning processes going back many years, and the multilevel City Region deals being developed across the United Kingdom appear to take for granted a high level of local government-industry cooperation and negotiation.

Integrated policies need to develop through a polycentric policy process that strikes a balance between local specificity and national competence and responsibility. For example, the City Region deals are intentionally bespoke and unique, to allow them to be tailored to a particular region's strengths. However, this uniqueness makes it difficult to construct a common evaluation process and to draw clear lines of responsibility and accountability. Self-determination can even reinforce local disparities. A wider perspective is needed to specifically target inequality while marshalling external resources and achieving a level of systematization that supports inter-regional comparisons.

Planning for even small disruptions, such as the closing of a single plant, may require years of discussion and evaluation. The transition of the entire coal or oil sector needs a longer timetable. Some of the most successful coal transitions are based on planning processes that began 20 years in advance (Caldecott et al. 2017).

An important component of integrated policies is to prepare youth for the future economy. That challenge is made easier with advance planning and by coordinating with educational and skills development policy.

6. Conclusion

The United Kingdom has acquired considerable experience over the past four decades in confronting the aftermath of the decline of the coal industry. This experience has been accumulated through multiple generations of experiments with regional development, both successes and failures. Significant economic disparities remain, and no comprehensive policy has been implemented to address them.

The United Kingdom's targeted transitional assistance policies are necessary but insufficient to ensure a Just Transition to net-zero carbon economy, for two reasons. First, these policies ignore the procedural aspect of justice. Given the scale of the required transformation and the many choices we face in bringing it about, a Just Transition requires serious and ongoing social consultation via multistakeholder negotiation and citizen assemblies; it cannot be driven by experts with a playbook of best practices. Second, transitional policies supporting workers and regions will fail if they run counter to the macro policies and institutions of the economy. Labor market policies affecting the bargaining power of workers, industrial policies affecting long-term investments in new technologies, financial institutions affecting long-term investments in low-carbon infrastructure, educational policies affecting long-term investments in human capital: all have a critical role to play and condition the success of more regionally based policies.

Several lessons and practices emerge that are relevant to US policymakers. Section 4 has presented our insights in detail, but in concluding, we highlight three ideas.

First, compensatory policies are insufficient. The effects of energy transitions on local economies are far-reaching and long-lasting, and welfare policies that compensate the directly affected workers do not address the ripple effects of local structural change. Instead, comprehensive policies tailored to a region's needs are required to discover a new engine of growth and empower workers at different stages of their careers, including youth, to embrace new forms of economic activity.

Second, regeneration policies can be cost-effective but are often limited in their ability to turn around a region. Although the United Kingdom's historical policy playbook has been centered on regeneration, evidence indicates that these policies are usually reactive: they begin after a dynamic of joblessness and the outmigration of skills, entrepreneurship, and investments have already set in. These policies are also often fragmented. They are more successful when they are more comprehensive and more long-term, as is the case with the EU Cohesion Policy.

Third, the recent participatory planning policies that attempt a more holistic approach to prepare for transitions show promise. The Just Transition Commission and the Well-Being of Future Generations Act are particularly innovative and could be emulated elsewhere. However, the Achilles' heel for many regional development policy initiatives in the United Kingdom is the scale of funding and continuity in the process.

Climate change policy will create new kinds of disruption, requiring new kinds of policies. Mitigation policy will simultaneously affect dozens of sectors and industries around the globe. Fossil fuels have been a foundation of economic growth for centuries, and decoupling growth from fuel consumption will bring a range of society-wide principles into question. It will also be politically precarious, since the immediate cause of disruption will be the intentional creation of the policies themselves. Without clear action to support the affected groups, a shared commitment to make the necessary societal changes to combat climate change will be unlikely.

To garner public support, Just Transition policies need to be seen as effective and attractive to the main political coalitions. In the United Kingdom, transition and regional development policies have been pursued by both Labour and Conservative governments, and different mixes of ideology have been explored through a long history of experimentation with coalfields remediation, regional revitalization, and collaborative decisionmaking. Unlike much of continental Europe, in the United Kingdom, industry engagement has long been at the heart of regional development policy.

Our review of past and current UK policies has begun to yield a vision for effective Just Transition policy. Such policy needs to be proactive, built on deep engagement, and feature layers of coordination and monitoring. It must address the needs of workers, firms, and communities, with different but integrated policies for each group. It must be part of a campaign to develop a shared vision for the future, while developing a sense of urgency for an economywide transition. It will require community engagement on a massive scale.

Finally, Just Transition policy needs to be based on learning from past mistakes. As regions across the globe struggle with the transition and develop new policies, their experiences need to be collected and evaluated. Given the long history of expensive and unsuccessful strategies, research is needed on what kinds of approaches are cost-effective. Such research will need to combine economics, political economy, sociology, and other fields to construct comprehensive understandings of how policies interact with communities and with each other. This report is part of a project that aims to contribute to this sharing of best practices, to ensure effective policies for the vast disruptions of the next generation.

Appendix

1. Coalfields Enterprise Fund

1.1. Background

The 1998 Coalfields Task Force recommended that the UK government set up a £50m fund, in collaboration with the European Investment Bank, to finance small- and medium-sized businesses in coal regions. The Task Force anticipated that such a fund could create 1,500 new jobs while fostering economic development and diversification.

In its response to the Task Force report, the UK Government indicated that it would set up such a fund within six months. But a series of missteps set it back a full five years. To get funding from the UK Government, the program would need the sign-off of the European Commission. But the Department of Communities and Local Government initially failed to secure this sign-off after appointing a fund manager without the required financial services accreditation. Further, the Department had expected that many private financiers would be interested in contributing to the fund, and that the EIB would provide guarantees for such contributions; in both cases, it drastically overestimated these parties' appetite for such a project. In 2002, the European Commission signed off on a deal that would see the UK Government set up a £20 million fund in collaboration with Barclay's Bank, but the deal fell through when the parties failed to agree to terms. Finally, in May 2004, the UK Government announced the creation of a £10m Coalfields Enterprise Fund (CEF).

1.2. Administration and Programs

The CEF was established as a commercial venture capital fund with a focus on coalfield regions. The UK Government provided the full £10m fund in 2004, with the expectation that all of it would be invested within five years. Ultimately, the program was to come at net zero cost to the state, with the CEF eventually returning all the funds to the government, plus a "modest financial return." The fund was managed by Enterprise Ventures Limited, a Preston-based venture capital firm; Enterprise Ventures also coordinated with a network of regional investment advisors to tailor its support locally.

The CEF invested in early-stage small- to medium-scale enterprises in former coal communities. Investments ranged from £40,000 to £500,000 and were to be matched at least 1:1 by other private loan or equity sources. The fund was only active in England, and divided the country's coalfields into six regions for allocating funding.

By 2009, the CEF had invested over £8.0 million in 26 different businesses. Of these 26 businesses, 23 were located in "eligible coalfield wards"; the remaining three employed people living in eligible coalfield wards but were themselves located outside. These investments were matched by a further £30.9 million from private funds, a 3.55 to 1

matching rate. The investments collectively created 482 direct jobs. One example of a CEF investment is H2O Networks, a fiber-optic cable installer in Haydock, England. The company had four employees when CEF invested in 2006; today it has over 100.

In 2009, the Department of Communities and Local Government authorized a further £10 million to the Fund, to be supplemented by £10 million from private sources. It also extended the Fund's lifetime to 2014. This left the CEF with a lifetime total of £30 million, still only 60% of what the Coalfields Task Force recommended the state contribute. The Department also authorized a £10 million (£5 million public and £5 million private) Coalfields Growth Fund to complement the CEF's investment. The Coalfields Growth Fund, also set to expire in 2014, funded businesses with a higher capital requirement; its investments ranged from £500,000 to £2 million.

The CEF stopped operating in 2014. There is no report yet as to its impact or the total investment disbursed.

2. Regional Growth Fund

2.1. Overview

The Regional Growth Fund (RGF), which ran from 2010 to 2017, financially assisted private business investments in areas of England where private entrepreneurship and private-sector job growth had been lacking.

Funding for the RGF was set aside in the June 2010 government budget, but the program was formally outlined in an October 2010 report by the Secretary of State for Business, Innovation, and Skills titled "Local Growth: Realising Every Place's Potential" (House of Commons Library 2016). The report called for the creation of a £1.4 billion fund to be used over three years to support local growth in poorer regions (UK Department for Business, Innovation and Skills 2010b). The Fund was given two primary objectives:

1. "To stimulate enterprise by providing support for projects and programmes with significant potential for economic growth, leveraging in significant private sector investment, and creating additional sustainable private sector employment; and
2. To support in particular those areas and communities that are currently dependent on the public sector to make the transition to sustainable private sector-led growth and prosperity" (UK Department for Business, Innovation and Skills 2014b).

The Fund does not explicitly address coalfield communities, but it does seek to treat many of the challenges such communities face. For example, the UK Department for Business, Innovation and Skills (BIS) cites "a gradual decline of significant industries" and "derelict land" as a rationale for RGF support in certain areas; the 1998 Coalfields Task Force explicitly cites these issues as challenges that must be solved to re-

invigorate coal-impacted communities . The same BIS report notes that the map of RGF support closely aligns with the map of National Coalfields Programme support (see Figure 1).

2.2. Mechanisms and Implementation

2.2.1. Administrative Structure

The Regional Growth Fund fosters economic development by providing a host of resources to eligible organizations. The bulk of its support consists of direct subsidies for businesses for capital investment, innovation projects, or workforce development. The Fund also offers more open-ended loans and grants to encourage business growth (UK Department for Business, Innovation and Skills 2014b).

The RGF awards funding using bids. It closed its first round of bids in January 2011, with a plan to close three additional rounds by the end of 2014. A two-year review in 2013 highlighted the success of the Fund and as a result it was announced that the Fund would offer a total of six rounds and commit a total of £3.2 billion. Funding for the RGF is provided by the Ministry of Housing, Communities, and Local Government and the Department for Environment, Food, and Rural Affairs. The final round of bidding closed in July 2016 and the RGF disbursed its last funding in March 2017. The end results of its funding activities (in terms of jobs created and protected) are expected to emerge in the early 2020s. The Fund has provided funding to a total of 521 bidders, out of 1,908 applicants (House of Commons Library 2016).

RGF funding is designed to catalyze private investment; as such, the Advisory Panel will only recommend a bid if RGF funding can be matched with private funds. An interim report in 2014 showed that, through the first four rounds, the Fund spent £2.6 billion and leveraged £14.4 billion of private funding, a matching ratio of 5.5:1 (Plymouth City Council 2014; UK Department for Business, Innovation and Skills 2014b).

The 2010 “Local Growth” Report also recommended alignment with the European Regional Development Fund (ERDF, see EU Cohesion Policy for more detail). The ERDF allocated £2.8 billion to economic development in England between 2007 and 2015. Bidders to the RGF were encouraged to seek additional support from the ERDF (UK Department for Business, Innovation and Skills 2010b).

The RGF uses the following process to allocate funding (House of Commons Library 2016):

1. RGF announces a new funding round and invites bids.
2. Bids are appraised for their eligibility.
3. An Advisory Panel makes recommendations for which bids to support.

4. The RGF drafts terms of investment, to be agreed upon with the funding recipient.
5. Selected bidders submit to a due diligence inquiry.
6. A board of Ministers formally approve or deny bidding requests, based on Advisory Panel recommendations and their own judgement.
7. 7. Funding recipients draw down funds on a quarterly basis, in accordance with the agreed-upon terms of investment.
8. 8. The RGF monitors funding recipients' progress against their agreed-upon schedule.

The Advisory Panel consists of 12 members, including city council members, academics, and executives of large private institutions. The Panel may also invite the advice of independent experts. It submits its recommendations to a group of Ministers representing the Department for Business, Innovation, and Skills; the Ministry of Housing, Communities, and Local Government; the Department of Transport; the Department for Environment, Food, and Rural Affairs; the Ministry of the Treasury; and the Office of the Deputy Prime Minister. This group has final say over the proposals and can choose to ratify, amend, or reverse the Advisory Panel's recommendations (UK Department for Business, Innovation and Skills 2010b).

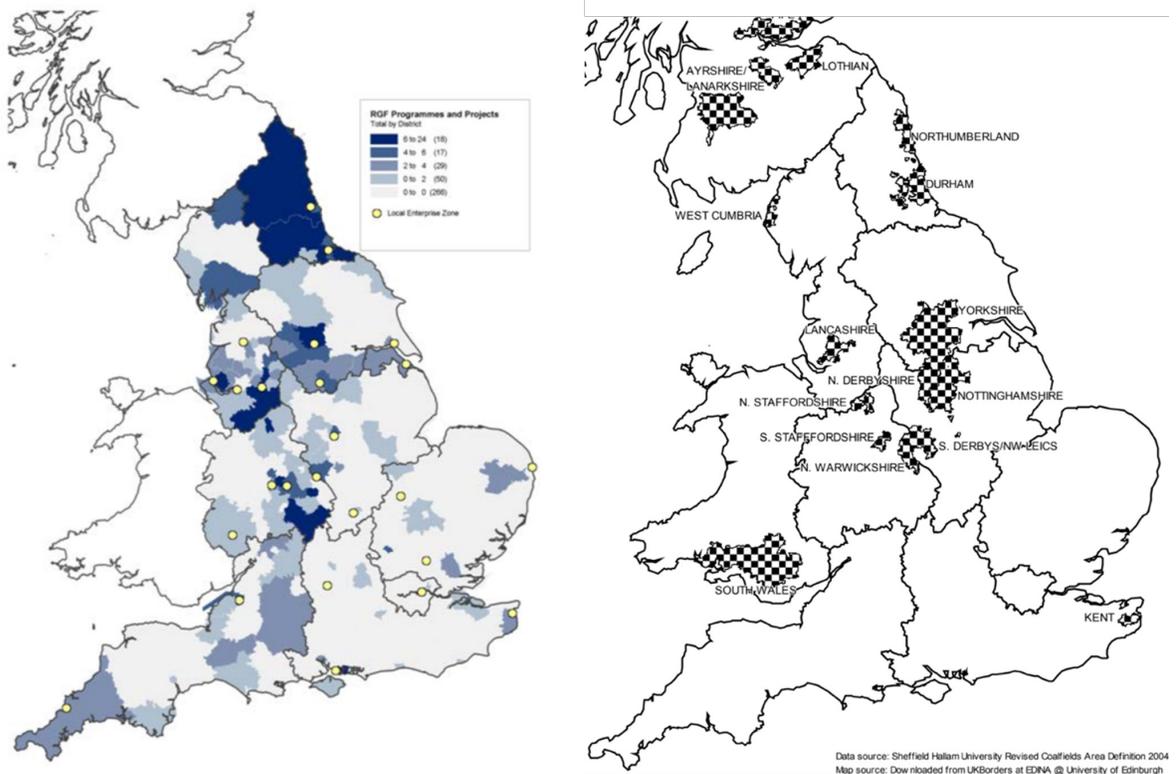
2.2.2. Programs and Beneficiaries

Eligibility for RGF support is intentionally open ended. Any organization that can “demonstrate a compelling contribution to delivery of sustainable increases in private sector employment and economic growth” is eligible to apply (UK Department for Business, Innovation and Skills 2010b). The Fund is open to all areas of England (but not Wales, Scotland, or Northern Ireland), though BIS notes that “some parts of the country, particularly where there is currently high employment, low levels of deprivation and a vibrant private sector, may struggle to demonstrate how they meet the second objective of the Fund” (UK Department for Business, Innovation and Skills 2014b).

Bidding is open to private companies (both large and small), social enterprises, public-private partnerships, educational institutions, and local partnerships of the above. Rounds 5 and 6 were restricted to strictly private sector organizations (House of Commons Library 2016). An interim audit of the program found that a majority (76%) of RGF funding had gone to large (250+ employees) firms (UK Department for Business, Innovation and Skills 2014b).

The RGF does not accept bids for less than £1 million in order to avoid over-stretching its resources. It distinguishes between two categories of bids: “projects” and “programmes.” “Projects” consist of direct investment into a business for the purpose of creating or protecting jobs. “Programmes” consist of a collection of smaller projects – which may individually fall below the £1 million threshold but which collectively

Figure 1. A map of RGF funding 2011-2014 (left) shows a close correlation to the location of English coalfield communities (right).



Sources: UK Department for Business, Innovation and Skills 2014; Foden, Fogerthill, and Gore 2014)

meet it – that together contribute to the objectives of the RGF, and which RGF funds through an intermediary. The 2013 review of the Fund found a roughly even split between the two categories, with projects receiving 44% of the total funding and programmes receiving the other 56% (UK Department for Business, Innovation and Skills 2014b).

The Advisory Committee assesses bids based on the following criteria (House of Commons Library 2016):

- Project location – the Committee prioritizes projects in regions with a high dependence on public sector support (based on a host of predetermined indicators);
- Additionality – bidders must show that the project would not succeed without RGF support, and that they will create new jobs rather than just reallocating economic activity;
- Private sector growth – bidders must show the number and types of jobs their project will create;

- Value for money – the Committee prioritizes projects where RGF funding will provide significant economic, social, or environmental benefits; and
- State aid compliance – support for the project must be allowed under EU State Aid rules (see text box).

The guidelines also note a preference for environmentally sustainable growth, though this is not deemed as essential.

3. National Coalfields Programme

3.1. Overview

The National Coalfields Programme (NCP) was planned to be a 10-year, £386.5 million program operated by the English Partnerships (EP – a national economic development agency) with the goal of remediating and redeveloping the UK's abandoned coal sites (Coalfield Regeneration Review Board 2010b). At the NCP's launch in 1996, 57 abandoned coal sites – a total of roughly 5,000 acres – formerly belonging to British Coal were transferred from the British Coal to the EP with the intention of preparing the land for productive use (DCLG 2011).

The final Report of the 1997 Coalfields Task Force recommended, among other things, expanding the NCP to include more sites than the original 57 (Coalfields Task Force 1998). Acting on the Task Force's recommendation, the government expanded the NCP mandate to cover an additional 29 sites, increasing the total acreage to 10,000. The program's stated goals were to safely remediate all 86 sites, to create 22 million square feet of new commercial floor space, to construct 8,000 new homes, to leverage £1 billion of private investment, and to create 42,000 new jobs (DCLG 2011).

The NCP has been expanded and extended four additional times since the Task Force Report in 1997. Its portfolio ultimately included 107 sites across seven regions of the UK, and it was projected to run until 2017, 21 years after the program began. It should be noted the NCP exclusively focused on physical land remediation and that, even after it completed its work, substantial economic need remained in coalfield communities (DCLG 2007).

The NCP was allocated £386.5 million in 1996 and has retained this level of public funding even as its holdings increased. Funds were allocated annually to the program by the Department for Communities and Local Government. The funding was "ring-fenced" (specifically restricted) for use by the NCP. However, a 2002 law granted the Programme flexibility over its investments, allowing it to invest in coalfield-adjacent projects in addition to those directly concerned with the abandoned sites. Since its inception, the Programme has expanded to 107 total sites (NAO 2009).

3.2. Mechanisms and Implementation

Administrative Structure

The NCP was originally housed within the English Partnerships, a public economic development (or “regeneration”) agency. The chief focus of the agency was land acquisition and development; in pursuit of this objective, it partnered with private investors to fund large residential and commercial development projects in economically distressed regions. The leadership of the EP was independent of other government agencies, though funding for the agency was routed through the Department for Communities and Local Government. In December of 2008, the EP was dissolved and its responsibilities were transferred to a new agency, the Homes and Communities Agency, a non-departmental body. All of the EP’s responsibilities under the NCP became the responsibility of the Homes and Communities Agency.

The NCP funded redevelopment projects via public-private partnerships. The Programme would fund remediation of the site and partner with private investors and local developers to find a new purpose for the site. Funding was disbursed as loans and equity, rather than grants, providing the Programme with a steady stream of returns to supplement its public funding.

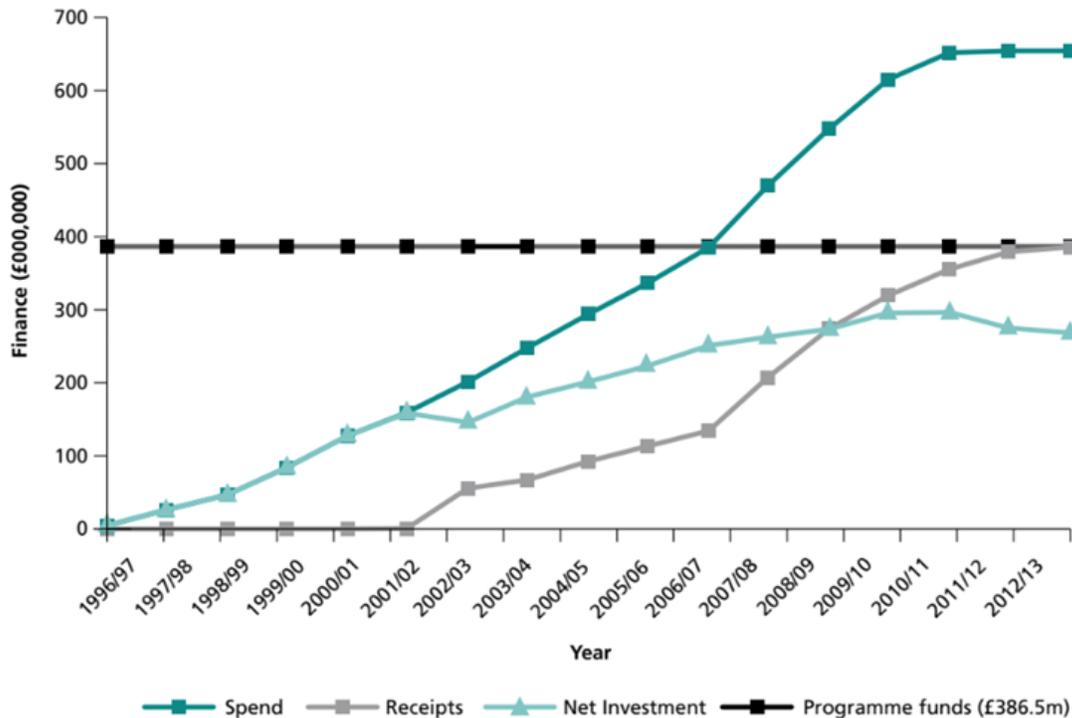
The National Audit Office (NAO) published its final report on the NCP in 2009. As of the publishing of that report, the NCP had spent £464 million of public funds. It had begun work on all 107 sites and succeeded in redeveloping 54 of them. The report projected that the program would earn £334 million by selling off its property holdings, making the net cost of the program £542 million. It is unclear to what extent these projections have borne out, as the NAO has not performed an audit on the program since (NAO 2009).

Programs and Qualified Entities

The National Coalfields Program operated by purchasing “derelict” (contaminated) land from its owner and partnering with local private companies to bring it back into productive use. Beneficiaries of the NCP are highly geographically specific, with the program only administering sites assigned to it by external parties. The 107 sites are distributed across 12 different counties, with Yorkshire, Durham, and Nottinghamshire collectively receiving over half of the designated sites and investment (NAO 2009).

When it was first established, the NCP was assigned 57 abandoned sites by the Conservative-majority Parliament in 1996. The Coalfields Task Force, convened by the successor Labour-led government, recommended an additional 29 sites. The Task Force recognized the ongoing need for transformation in coalfield communities and, in response, expanded the NCP and inaugurated the Coalfields Regeneration Trust and the Coalfields Enterprise Fund to address the economic and social aspects of the process; however, it viewed physical remediation as a priority and devoted the bulk of coalfields funding to the NCP (House of Commons 2010). The subsequent additions were chosen by the Coalfield Communities Campaign (CCC), an independent

Figure 2. National Coalfields Program Spending Trends



Source: EP Monitoring data

Notes: The Programme has received a total of 386.5m of public funding, which has been complemented by an increasing amount of receipts from sale of its properties. The Department of Communities and Local Government projected in 2009 that total spending would reach £647 by 2013, though net investment would be much less when accounting for receipts (Source: DCLG).

organization representing more than 80 local governments in formerly coal-dependent communities. The CCC made its final selections in 2007 (DCLG 2007).

Once the sites were selected, the EP prioritized those with the greatest potential for job creation. Having completed those, it moved on to sites where the primary benefits were ecosystem protection and public safety. During the Programme’s operation, sites were sorted into two categories. Category A sites were those that were fully funded and nearing redevelopment; Category B sites were those that still faced a funding shortfall and needed further remediation and redevelopment (Coalfield Regeneration Review Board 2010b).

As of a 2010 review, 93 of the 107 sites were classified as Category A. The same review forecasted that the NCP would result in of 42,500 jobs created, 13,100 new homes built, 10,000 acres of land redeveloped, and 22 million square feet of new commercial floor space, as well as £2.1 billion of private capital leveraged (DCLG 2011).

4. Coalfields Regeneration Trust

4.1. Overview

The 1998 Coalfields Task Force determined that more than physical remediation and redevelopment was needed to address the challenges facing coal-dependent communities. The Task Force's report noted unemployment rates above 20% in major coal regions. Likewise, the Task Force reported significant out-migration of working-age adults from coal regions and a drop in average income after mines closed, as well as challenges to health, education, and mobility.

While the NCP addressed physical remediation of mine sites, it was insufficient to address the other complex challenges facing these communities. Accordingly, the Task Force recommended that the UK Government establish a program to improve quality of life in coal-dependent communities.

In response to the task force's recommendations, the government in 1999 authorized the creation of the Coalfields Regeneration Trust (CRT), a fund dedicated to fostering economic and social development in regions hurt by the decline of the coal economy. The CRT was set up as an independent charity operating in England, Scotland, and Wales. Its mission was to enable former coal communities to become prosperous, healthy, and self-sustaining. To this end, it was mandated to provide grants to social enterprises, community service organizations, workforce development programs, and youth engagement programs in regions impacted by the decline of the coal economy.

4.2. Administration

The CRT operates in England, Scotland, and Wales. When it was first established, it was governed by a Board of Trustees with two representatives from Wales, two representatives from Scotland, and four representatives from England. This structure has since changed, however. Today, the CRT maintains a governing board of 16 non-executive trustees. 13 of these trustees are elected by a simple majority of the board, and the remaining three are appointed respectively by the Secretary of State of the Department of Communities and Local Government, the Minister of Housing and Communities in the Scottish Government, and the Minister for Local Government and Communities in the Welsh Government, respectively. Grantmaking, business development, investment, and risk decisions are devolved to individual committees, staffed by members of the board. The total full-time workforce of the CRT stands at around 40 people today.

The CRT maintains separate operations in Wales, Scotland, and England, each with its own distinct funding stream and programs. In Wales, funding is appropriated by the National Assembly for Wales. In Scotland, funding is appropriated by Communities Scotland (a national economic development agency). And in England, funding is appropriated by the Office of the Deputy Prime Minister.

In Scotland and Wales, the CRT provides grants of between £10,000 and £100,000, whereas in England grants range from £10,000 to £300,000. Local or regional public agencies are eligible for grants in excess of £300,000. Grants are divided into two categories based on what they support: capital expenditures (including buildings, vehicles, and hardware) and revenue expenditures (including salaries, rent, heating, and lighting). Revenue funding has proven the more popular of the two, with the English arm of the CRT receiving a “deluge of applications” for it. While the CRT is not mandated to allocate a specific percentage to either category, the English arm of the CRT in 2009 paused revenue grants due to the imbalance between the two.

The English CRT has received funding from the Office of the Deputy Prime Minister in three-year cycles, with the amounts ranging from £20 million to £55 million for the whole three-year period. In 2011, the DCLG allocated a final £53 million tranche of public funding but conditioned the funding on the CRT (a) saving 30% on its operating costs, and (b) shifting its focus from grant funding to small business loans.

In April 2015, the CRT in England became, following government guidance, independent and self-financing, supporting all of its activities via four wholly-owned subsidiaries that generate funds from the Trust’s investments into small businesses (these businesses include CRT Property Investments Ltd., CRT Renewable Energy Ltd., CRT Trading Ltd., and CRT Community Enterprises Ltd.). The organization has continued to function for five years in this form, albeit at a drastically scaled-back level. The Trust’s most recent five-year plan notes that the organization is financially sustainable but plans to lobby the UK Government for several million pounds in order to deepen its impact.

In Wales, the CRT received roughly £1.5 million per year from the National Assembly for the first decade of its operation and had, by 2010 awarded £14.7 million in grants to 667 different projects. The bulk of this funding went to small (1-5 people) organizations identifying as either “social enterprises” or “community service organizations.” In 2011, responding to the same austerity measures the CRT faced in England, the Welsh government contemplated replacing the CRT with other programs targeted at economic development in coal regions, but has not done so. As of 2020, the Welsh government was continuing to fund the Trust in Wales on a year-to-year basis.

In Scotland, the Trust is funded year-to-year by the Scottish Government in tranches of £500,000 to £1 million. As of 2019, the fund had granted or invested over £20 million in over 1,000 different projects and community organizations.

Since March 2015, the CRT has continued to receive annual funding from the Scottish and Welsh governments, while relying on returns from its subsidiaries in England. In the five years since privatization, income for the entire trust has averaged £4.8 million per year, with expenditures averaging £4.1 million per year. The Trust has provided an average of £0.9 million per year in grants, with between 50% and 70% of this funding going to communities in England. These figures represent a significant drop-off from FY2015, when the Trust recorded £13.9 in income, £5.1 million in expenditures, and £1.9 million of grants awarded. Recent figures are unavailable, but NAO (2009) reports that in its first decade of operation, the trust awarded £160 in grants to coalfield

communities.

4.3. Beneficiaries and Programs

The Coalfields Task Force identified a population of 5.5 million people in England, Scotland, and Wales living in former coal mining communities. CRT activities are geographically restricted to these communities identified at the Trust's founding.

Since its inception, the Trust has evolved significantly beyond its initial form as a simple grant-making charity. Today, it operates a number of tailored and targeted programs to provide specialized support to the communities it addresses. The programs are operated separately in England, Scotland, and Wales, and are in many cases highly location-specific. The currently operating programs are listed below, disaggregated by country.

4.3.1. England

COVID-19 Recovery and Resilience Fund: The CRT provides grants of up to £10,000 through this program to organizations that are delivering support services to vulnerable populations in the pandemic. Projects must start immediately and provide services for at least 2 months; the CRT will fund up to 100% of core costs and up to 50% of capital costs. Grants are only available to projects that benefit communities in the top 30% of England's Indices of Deprivation.

Coalfields Food Insecurity Response Fund: The CRT tackles hunger in former coal mining communities by funding food insecurity-related projects with grants up to £2,500. The program is run in partnership with the British surplus food supply business Company Shop. Company Shop has pledged £100,000 of funding to the program; it will match CRT grants 1:1 with cash and 3:1 with goods purchased at Company Shop stores. The program is available to coal mining communities in the top 30% of the Indices of Deprivation.

Coalfields Community Investment Programme: The CRT provides free support to charities, social enterprises, religious organizations and other economic development nonprofits in former coalfield areas. Support includes access to economic data, promotion and marketing, support in acquiring finance, networking opportunities, and organizational development. Organizations are eligible for support if they offer the majority of their services in an eligible coalfield ward.

Game On England: The CRT operates a soccer program for youth in former coalfield areas. Game On England helps youth maintain health and build skills. The program has operated for 13 years and is only available in Yorkshire.

Employment and Skills Service: The CRT provides personalized job services for unemployed individuals in former coal communities. It collaborates with local service providers, both public and private, to reduce barriers to employment. Services include

job application support, access to credit, skills training, and licensing. The service is available in areas that fall within the top 10% of the Indices of Deprivation.

4.3.2. Scotland

Capacity Building Development and Support: The CRT helps small nonprofit organizations in former coal communities gain access to funding and business development opportunities by providing mentoring, access to training materials, and facilitating networking. The program triages its support between three levels of focus (one-on-one training, tailored support to organizations with the greatest need, and general support to all organizations) to maximize its impact.

Coalfields Investment Programme: This program seeks to help nonprofits and social enterprises become financially sustainable by providing training workshops and seminars to transfer knowledge about fundraising. Through it, the CRT also encourages nonprofits to develop into social enterprises and generate returns. Eligible organizations must operate in former coalfield areas and provide services that improve the environment, promote youth engagement, provide community service opportunities, or foster practical skill building.

Coalfields Training and Enterprise Hub: The “Hub” is located in Kincardine, Fife and is designed to be a one-stop shop to help local businesses grow. It houses a variety of business development services, including a community center, an innovation lab, and a business incubator.

Coalfields Community Future: This program is designed to extend support to former coal communities that have not benefitted substantially from other CRT opportunities and services. CRT staff work with local leaders to devise Community Action Plans that target community development and provides up to £20,000 to each for implementation. The program is active in 11 counties in Scotland and has resulted in the creation of 50 five-year action plans.

Coalfields Longannet Initiative: After the 2016 closing of the Longannet Power Station, the CRT engaged 12 nearby communities to develop “The Vision for the Longannet Communities,” a long-term adaptation plan. Working in concert with organizations such as Go Forth Kincardine and Longannet Initiative Strategic Partnership, the plan seeks to bring 1,000 new jobs to the region.

Coalfields Worx: This program acts as an employment bridge, setting unemployed individuals on the path to a career in environmental services. The CRT partners with the Fife Employment Trust to place individuals in skill programs and on-the-job training. The program is only available in Kincardine.

Coalfields Sport Works: The CRT offers employability programs in partnership with the Falkirk Football Foundation. The programs seek to impart employable skills and knowledge to disadvantaged youths.

Creative Regeneration: The CRT facilitates networking and partnerships for local businesses in former coal communities in order to promote place-based revitalization projects. The program has a particular focus on improving the aesthetics of downtown areas.

Coalfields Community Action: The CRT provides capacity building services to nonprofits and social enterprises in former coal mining communities. In particular, this program offers fundraising support, budget planning support, and business development training. It also assists nonprofits in developing into social enterprises. The Coalfields Community Action program operates in all 89 of Scotland's eligible coalfield wards.

Coalfields YouthBanks: The CRT's YouthBanks program empowers young people in coalfield regions to take on projects to benefit their communities. Through the program, the CRT offers fundraising and planning support to youths taking on self-driven community development projects. There are six operating YouthBanks in Scotland, with three more planned.

Coalfields Ambassadors: The Coalfields Ambassadors program enables the CRT to tailor its support to local conditions. Through it, the CRT recruits suitable candidates from former coal communities to advise it on community development and local networks. In return, the CRT provides these individuals with training opportunities and funding advice on their own projects.

Coalfields Miners Welfare Support Services: The CRT empowers local welfare agencies to provide former coal miners with crucial welfare services. Organizations that offer community building services, job training, resilience services, and other support services are eligible for grants of £400 - £100,000. Thus far, the Coalfields Miners Welfare Support Services Program has provided 29 grants. The program has recently shifted away from grantmaking and towards capacity building and developmental support.

Coalfields Community Network: Through the Coalfields Community Network, the CRT seeks to help early-stage nonprofits in former coal communities overcome the barriers of getting off the ground. To this end, it offers skill building workshops, networking opportunities, access to relevant resources, and direct support from its Outreach Development Team.

4.3.3. Wales

Coalfields Community Grant Programme: The CRT supports nonprofit and community organizations that provide skill building, health, community, childcare, and employment services through £500 - £7,000 grants. The program has provided over £20 million in grants since 1999. Organizations must demonstrate "clear and immediate benefits for an eligible coalfield community" to receive funding.

Game On Wales: The CRT seeks to foster healthy lifestyles and youth engagement in former coal communities through sports. To this end, the Came On program offers soccer training programs to young people, aged 7 to 16, who come from areas of high crime, health inequality and high poverty. The program also provides grant up to £500 for young people aged 13 to 19 to purchase sports equipment.

United Welsh Housing Association Together Fund: The CRT supports projects that benefit public housing tenants and tackle community issues. In partnership with the United Welsh Housing Association Together Fund, the CRT provides grants up to £5,000. Applicants must operate in one of five specified communities in Wales.

Practical Support: The CRT provides local nonprofits and social enterprises with a host of support services, including investment (CRT and external funds), networking opportunities, governance support, mentoring, asset transfer support, community consultations, energy support, grant management services, and impact and evaluation studies. The CRT partners with local community development organizations in some locations to deliver these services.

Community Asset Development and Transfer: The CRT works with local communities to leverage underused assets as a way to revitalize their downtowns. The service is highly localized; in past projects, the CRT has purchased abandoned buildings and refurbished them to house credit unions, job centers, and cultural centers.

5. Single Regeneration Budget

5.1. Overview

From 1994 to 2001, the Single Regeneration Budget (SRB) was the UK government's main regeneration fund to support deprived areas. The program was designed to support regeneration efforts in communities in England that have suffered economic hardship, with associated declines in employment, income, and private investment. It regrouped funding from 20 existing government programs and funding streams in order to streamline government assistance for local regeneration projects, and it established a new competitive grant program to further support those projects.¹

What is Regeneration?

“Regeneration” is a term commonly used in UK policy to refer to economic development policies aimed at community revitalization. It specifically refers to policies targeting communities that have experienced economic decline.

The SRB was intentionally broad in scope, in the sense that it did not specify an industry or geography to be supported. The funds from the SRB could be flexibly applied to any region in the country for a wide variety of goals, but were designed to

1 https://www.persee.fr/doc/htn_0018-439x_1997_num_1_1_2574.

support locally targeted projects. There was a strong emphasis on partnerships and projects that integrated the ideas and expertise of local stakeholders. Local project leaders were directly in charge of implementing their programs, with some oversight and guidance provided by the Government Offices.²

Funding was distributed through existing programs coordinated by the SRB and the newly established SRB Challenge Fund, which was a competitive bidding process to encourage creative regeneration solutions. Over the six rounds of funding between 1994 and 2000, SRB spent £5.7 billion on 1028 local regeneration projects across six years and facilitated an additional £20 billion in spending on projects by local authorities and the private sector.³

The SRB Challenge Fund was modeled after the City Challenge initiative (1992 to 1998) which was focused exclusively on inner city communities.⁴

The SRB was one of several policies designed to coordinate regeneration efforts. It was followed by the Neighborhood Renewals Fund in the 2000s, the Local Growth Fund (implemented through the local enterprise partnerships) and most recently the Towns fund.

Proposed text for the box. Government Offices, established in 1995, were regional offices representing ministries of the government in the regions to deliver central government policies. The New Labour Government came into power in 1997 and established the Regional Development Agencies (RDAs) in an effort to devolve decision-making to the regions. Their mandate was to drive regional economic development. Both Government Offices and RDAs were abolished between 2010 and 2011 under austerity policies. RDAs were later replaced by Local Enterprise Partnerships (LEPs, see Box...).

5.2. Mechanisms and Implementation

Administrative Structure

The SRB was administered by a range of governing bodies over time. Originally, there were two main administrators: the Government Offices, which represented government departments coordinated by a regional director, and the Secretary of State for the Environment who oversaw the Government Offices' activities.

The SRB combined the regeneration activities of some 20 programs within five

2 https://www.landecon.cam.ac.uk/pdf-files/cv/pete-tyler/SRB_RESEARCHSUMMARY_2007.pdf.

3 <https://indicesofdeprivation.co.uk/2015/08/19/the-single-regeneration-budget/>.

4 <https://www.building.co.uk/what-went-right-10-government-ideas-that-actually-worked/3068785.article>.

different government departments.⁵ Most of the funding for the program was distributed through these existing programs. However, some budget was set aside for the SRB Challenge Fund, a competitive bidding process that provided funding for individual projects. Each Government Office received a Challenge Fund budget based on measures of deprivation and population. Government Offices took the lead on evaluating and accepting project bids and coordinating monitoring and evaluation for ongoing projects.

Regional Offices vs RDAs

Regional Offices later inspired the Regional Development Agencies (RDAs). They were established in 1997 and were more developed and better funded than the traditional Regional Office structure. They were both abolished under austerity policies between 2010 and 2011.

Qualified Participants & Programs

Government Offices received the funds from the single regeneration budget based on need and population to distribute to communities based on the deprivation index and population.

Program Coordination

A major component of the SRB was coordination between existing programs within the national government that conducted economic development activities. See the table below for a breakdown of the organizations that were included in this coordination and their respective funding levels at the start of the SRB.

The consolidation of these programs under one umbrella was meant to facilitate the distribution of funds and lower the administrative burden for communities seeking support. Funding for these programs declined throughout the life of the SRB, and were directed towards the SRB challenge fund.

- Urban Development Corporation: Urban Development Corporations (UDCs) started to develop and improve areas of the inner cities. The first two organizations started in 1981 in London's Docklands and in Merseyside. The Corporations especially encouraged private investment to come to the areas. UDCs acquire, hold, manage, reclaim and dispose of land.
- Housing Action Trust: Six Housing Action Trusts (HATs) were set up under the Housing Act of 1988 to regenerate local authority estates in poor suburban areas. HATs are managed by a board of elected residents and members of the local authority. The HATs had four main goals - repair and improve housing; manage housing effectively; encourage diversity; and improve quality of life in their communities. The HATs were absorbed into the English Partnerships Program.
- English Partnerships: English Partnerships was the national regeneration agency sponsored by the Department for Communities and Local Government. It was

5 https://www.persee.fr/docAsPDF/htn_0018-439x_1997_num_1_1_2574.pdf.

Table 1. Financial and Regional Scale of Major Policies

Department	Program	1994/95 Budget (Millions of Pounds)
Environment	Urban Development Corporation	286
	Housing Action Trust	88
	English Partnerships	181
	Estate Action	373
	City Challenge	213
	Urban Program	83
	Task Forces	16
	City Action Teams	1
Home Office	Safer Cities	4
	Section 11	60
	Ethnic Minority Grant Business Initiative	
	Program Development Fund	6
Employment	TEC Challenge	4
	Local Initiative Fund	29
	Business Start-up Scheme	70
	Education Business Partnerships	2
	Compacts	6
	Teacher Placement Service	3
Education	Grants for Education Support and Training	5
Trade & Industry	Regional Enterprise Grants	9

replaced by the Homes and Communities Agency in 2008.

- Estate Action:
- City Challenge: From 1992 to 1998, The City Challenge established councils in the most deprived inner city areas of local leaders and private developers to increase employment and quality housing.
- Urban Program: The Urban Program established 57 urban program authorities, expected to develop a coordinated approach to the problems of their areas by working with the private sector and government departments.
- Task Forces: The Government established task forces in areas selected primarily by urban deprivation metric. The overall objective was to increase the effectiveness of central government programs to meet the needs of disadvantaged residents. The Department of Trade and Industry's Inner Cities Unit manages the task forces and holds meetings with task force leaders to discuss policy, improve co-ordination, and share ideas.
- City Action Teams: City action teams worked with regional directors on work with the Department of the Environment, the Department of Employment, the Department of Trade and Industry and the Training Agency. The teams were focused on issues in inner cities and were designed to coordinate regional efforts.

- Safer Cities: The Safer Cities program (SCP) was created in 1988 by the UK Home Office to reduce crime and support social and economic well-being in 20 English cities and boroughs. The SCP leverages local coordinators and modest funding to implement preventive practices.
- Section 11: Section 11 offers basic tenant protections, requiring landlords to maintain a certain standard in rented properties.
- Local Initiative Fund: The Local Initiative Fund provides Local ward with annual funding for small grants that can go towards a variety of locally run activities. Examples of acceptable activities include: sports clubs, cultural festivals, youth activities, estate community events, environmental improvements, education and training classes, pensioner outings and day trips.
- Business Start-up Scheme: The business start-up scheme program provides small grants to new businesses developing in areas in need of regeneration.
- Education Business Partnerships: The business education partnership program were funded until 2011 by the government, but now exist mostly as voluntary partnerships between businesses and schools. The partnerships provide apprenticeship/internship based work experience for students to provide job training early in the process.
- Regional Enterprise Grants: Regional Enterprise Grants are small grants for small and medium business in communities with high unemployment.
- Other programs: The SRB also enveloped Teacher Placement Service Programs, Grants for Education Support and Training, Ethnic Minority Business Grants, The Initiative Program Development Fund, and the TEC challenge.

SRB Challenge Fund

Projects considered for SBR funding had to address at least one of the following core goals

- Create greater opportunity for employment
- Workforce development, particularly for disadvantaged communities
- Improve economic diversification and competitiveness
- Improve housing availability and choice
- Support ethnic minorities
- Improve community safety
- Protect and improve community environment and infrastructure
- Other enhancements to quality of life

Challenge Fund bidding was conducted once each fiscal year of the SRB's operation. The process starts with the publication of 'bidding guidance' and supplementary advisory material on financial guidance. Next, regional offices evaluate potential projects and provide feedback. Following the initial review, applicants build concrete delivery plans for their proposals. The Cabinet Competitiveness Committee reviews a portfolio of approved bids from each regional office and makes a final decision on the

funding amount for each project.

The SRB placed special emphasis on public-private partnerships, and many of the regeneration plans included significant private investment alongside the SRB funding. Unlike most previous efforts, funds were distributed based on the quality of the project idea and relative need in the community, not just need-based.

6. Skills Development Scotland

6.1. Overview

Skills Development Scotland (SDS) is the Scottish Government's centralized employment and workforce development agency, through which it delivers a broad variety of services to workers and businesses. The goals of SDS are:

- To enable businesses to find suitable employees when they are needed;
- To ensure workplaces are both productive and fair;
- To allow Scottish citizens to build skills, secure good employment, and progress in their careers; and
- To ensure equal opportunity (Skills Development Scotland 2015).

SDS was created in April 2008 by merging a host of skills- and employment-related programs already operating under the Scottish Government's purview. These programs included Careers Scotland, (parts of) Scottish Enterprise, (parts of) Highlands and Islands Enterprise, LearnDirect Scotland, ILA Scotland, the Big Plus, Training for Work, Skillseekers, and Modern Apprenticeships, among others (Hyslop 2009).

6.2. Mechanisms and Implementation

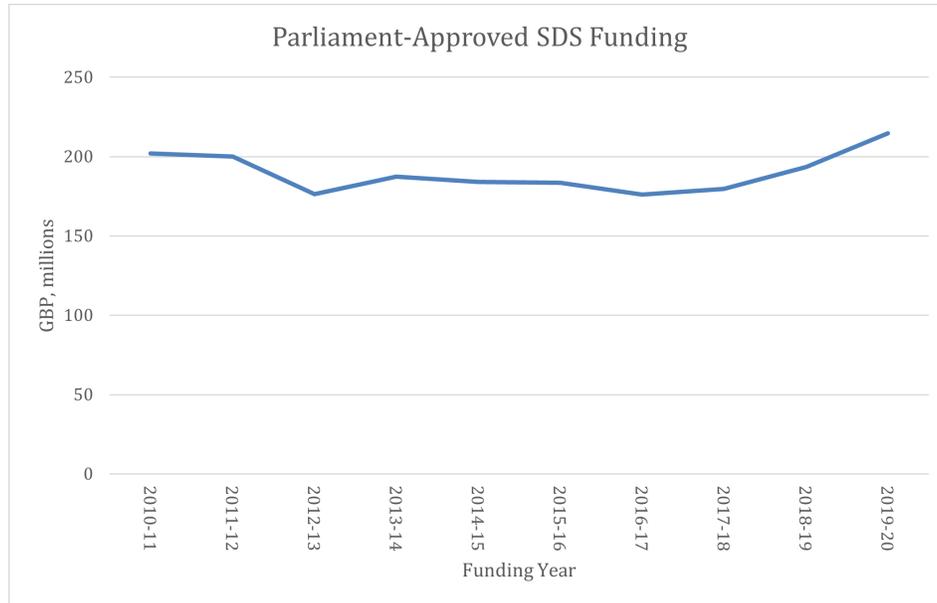
6.2.1. Administrative Structure

Skills Development Scotland is a non-departmental public agency. It operates as a limited liability company, with a non-executive board comprised of 17 members (Scottish Government 2017; Skills Development Scotland 2020n). The board is charged with incorporating into a corporate strategy the objectives set by Scottish Ministers. Board members serve four-year terms and are appointed by Scottish Ministers to represent a variety of backgrounds in the public and private sectors (Scottish Government 2017). The current Chair is Frank Mitchell, CEO of SP Energy Networks.

While SDS programs operate independently of the Scottish Government, Scottish Ministers nevertheless provide overall guidance for the direction of the agency. At the start of each business year, the Ministers provide SDS with a "Letter of Guidance," in which they set out targets and priorities for the coming year, along with the

organization’s funding level for the coming year (Hyslop 2009). Since founding the organization in 2008, Parliament has provided it between £175 and £215 million per year (see Figure 1).

Figure 3. SDS yearly funding, as approved by Parliament.



Source: Letters of Guidance 2009-2019.

6.2.2. Programs and Beneficiaries

SDS was founded to serve as a single administrative body overseeing numerous pre-existing workforce development programs. Since its founding, the organization has continued to operate most of these programs and added several new ones. Its programs are highly localized and are typically delivered either online or in person at its “High Street SDS Centres” (see below) (Skills Development Scotland 2020j).

Almost all of SDS’s activities are delivered in collaboration with third party providers. The organization early guidance included adopting “a collaborative approach with other partner agencies and organizations to capture synergies, avoid duplication of services and product offerings, and ensure added value and improved outcomes” (Hyslop 2009). To this end, SDS works with partners including Sector Skills Councils, Industry Advisory Boards, Scotland Enterprise, Community Planning Partnerships, and the UK Commission for Employment and Skills to leverage the skills of local providers of employability services.

Together with its local partners, SDS offers the following programs.

6.2.2.1. Redundancy Support (PACE)

The Partnership Action for Continuing Employment (PACE) Program is a Scottish Government program designed to address the issue of “redundancy,” or job experience and skills made unemployable by a changing economy. PACE is a collaboration between 22 different agencies – including local governments, universities, and workforce development companies – with SDS serving as the lead delivery organization (Skills Development Scotland 2020m).

PACE is set up to serve as a one-stop-shop for individuals facing redundancy. In addition to its national team, PACE maintains 18 local teams throughout Scotland (Scottish Government 2020b). Individuals seeking to take advantage of the initiative can engage with the teams and receive a host of services. Local providers offer free and impartial career guidance, along with résumé-writing advice, information packs, trainings, and seminars. Eligible individuals can also access “redundancy benefits,” (effectively unemployment benefits) through PACE centers (Our Skillsforce 2020).

PACE is SDS’s most explicit just transition-related program. As fossil fuel-related job losses increase, PACE will be a key factor in ensuring that the costs of decarbonizing the energy system do not fall disproportionately on certain communities and workers.

6.2.2.2. My World of Work

My World of Work is an online career information and advice portal. Individuals seeking to take advantage of SDS resources can register for an account and access guidance from career advisors, personalized lists of job postings, training courses, funding opportunities, CV helpers, and apprenticeship opportunities. The site offers tailored services to primary school students, secondary school students, college students, employed adults, and unemployed adults. My World of Work also supports those who are providing career services to others; users can register for an account as a parent, teacher, career counselor, or SDS partner (Skills Development Scotland 2020h).

6.2.2.3. My Kid’s Career

My Kid’s Career is a specialized website run by the SDS to support parents seeking to prepare their children for the job market. The site displays current job openings, as well as high-level analysis of economic trends in such subjects as growing industries, salaries by occupation, in-demand skills, and educational attainment. Users can also access free expert advice from career advisors and explore various pathways to employment. All such services are designed to make it easier for parents to support their children as they begin their careers (Skills Development Scotland 2020e).

6.2.2.4. High Street SDS Centers

SDS maintains at least 30 “High Street SDS Centres” in cities and towns across Scotland. Typically located in a town’s commercial center, these centers operate as

one-stop-shops for most of SDS's career services. Through the centers, individuals can access advice from career experts, training opportunities, help with résumés and interviews, career events, information about the local labor market, SDS web services, government unemployment aid, and support for parents. The centers are staffed by a mix of SDS employees and local partners' service providers (Skills Development Scotland 2020j).

6.2.2.5. Scottish Apprenticeships

Work-based learning comprises one of SDS's core functions. SDS has, since its inception, endeavored to connect individuals with on-the-job training and apprenticeship programs as a way to bridge the gap from education to employment. Since 2010, SDS has typically provided around 25,000 apprenticeship opportunities per year. High levels of interest in the program have led to a slight expansion, with SDS planning to deliver 30,000 in 2020 (Hyslop 2009; Swinney 2019).

New apprenticeship opportunities are provided based on the advice of the Scottish Apprenticeship Advisory Board (SAAB), comprised of representatives from a host of employers across a variety of industries in Scotland. All apprenticeships must be approved by the Apprenticeship Approval Group (AAG), a separate employer-led group that meets monthly to discuss new apprenticeships. SDS delivers its apprenticeship programs with support from the European Social Fund (Skills Development Scotland 2020a).

SDS offers three different apprenticeships:

- Modern Apprenticeships (MAs): The largest and longest-running of the three programs, MAs enable individuals to secure industry-recognized qualifications through a wage-earning apprenticeship program. Apprenticeships are offered in over 80 fields, from chemicals, to financial services, to tourism (Skills Development Scotland 2020g).
- Foundation Apprenticeships (FAs): FAs provide on-the-job training to students in their final year of secondary school. Delivered in partnership with the Scottish Qualifications Authority (SQA - Scotland's educational certification agency), FAs ease the transition from school to employment by providing students with proven industry-specific skills (Skills Development Scotland 2020c).
- Graduate Apprenticeships (GAs): GAs provide higher-level students with specialized on-the-job training to allow them to progress in their careers. Delivered in partnership with higher education institutions, GAs are accredited degree-level programs that provide participants with industry-recognized certifications (Skills Development Scotland 2020d).

6.2.2.6. Skills Planning

Skills Planning is core to SDS's mission to prepare Scottish jobseekers for a changing economy. Through Skills Planning, SDS three services to ensure that jobseekers

develop skills that will be in demand in the future (Skills Development Scotland 2020o):

- **Research:** SDS conducts independent evidence gathering to determine what skills will be in demand in Scotland's economy in the future. It provides free Regional Skills Assessments and Sectoral Skills Assessments to help individuals find clarity on how to match their training to their specific job market.
- **Training:** Building on its research, SDS works with local workforce development partners to ensure that any skill-building or job training programs they offer are aligned with the needs of a changing economy.
- **Career Guidance:** SDS-employed experts and partners provide jobseekers with the most up-to-date career advice, drawing on SDS research on market trends to guide individuals onto pathways that will set them up for stable, continued employment.

6.2.2.7. Employability Fund

SDS administers the Employability Fund (EF) on behalf of the Scottish Government. The EF uses public funding to ease young people's pathway into employment. SDS works with local employers to set up employment and on-the-job learning opportunities. Then, using funds provided by the EF, it pays the wages for an eligible applicant, typically a student or young adult ages 16+. The EF has funded over 9,000 positions (Skills Development Scotland 2020b).

6.2.2.8. Introduction to Work Place Skills

The Introduction to Work Place Skills (IWPS) is an award offered by SDS to improve hireability among those who have an uncertain path to employment. The program is targeted at three groups: (1) individuals who scored poorly on national standardized exams, (2) individuals who are neither students nor employed and lack requisite workplace qualifications, and (3) individuals who need core skills to become employed (Skills Development Scotland 2020f).

To these groups, IWPS offers a training and education course leading to the Certificate of Work Readiness (CWR). Participants complete 150 hours of workshops, supported work, and on-the-job training – putting in one to two days per week – before receiving the CWR. Course instruction is provided by SDS partners and funded either through external grants or through SDS's own Employability Fund (Skills Development Scotland 2020f).

6.2.2.9. The Big Plus

The Big Plus is Scotland's national literacy and numeracy campaign. The campaign began in 2004 with the intention of fostering universal literacy and numeracy through free tutoring services. SDS took over delivery of the campaign when it was founded in 2008 and has been the primary driver ever since, with guidance from Education Scotland (Skills Development Scotland 2020p).

Individuals seeking to take advantage of The Big Plus's services can meet with a tutor – individually or as a group – free of charge in a local library, college, or café. Tutors, venues, and some funding are provided by local governments.

6.2.2.10. National Third Sector Fund

The National Third Sector Fund provides unemployed and recently graduated individuals a ramp back into employment through a host of employability services. The three goals of the program are (1) to promote sustainable and quality employment, (2) to overcome barriers to employment for unemployed or inactive people, and (3) to increase skills and labor market opportunities for people with barriers to employment. To achieve these goals, the National Third Sector Fund delivers training opportunities, funding opportunities, and personally tailored career advice. It does so by contracting the services of external organizations including the Princes Trust Consortium, SCVO Consortium, Street League, Venture Trust, Impact Arts, Momentum, Lead Scotland, and Moving On Employment Project. Eligible participants include any individuals of working age and young people who expect to leave school within the next six months (Skills Development Scotland 2020i).

6.2.2.11. Our Skillsforce

SDS's Our Skillsforce program helps businesses build and maintain skilled workforces by providing employers with a host of online services. Through the Our Skillsforce website, employers can access free advice, skills planning, and HR funding. The website also helps employers engage with local schools and organizations to provide a clearer pipeline to employment. Our Skillsforce's resources span both national and local services (Our Skillsforce 2020).

The Skillsforce site also grants participants access to Marketplace, a networking service to connect businesses with schools and colleges in their area. Through the service, employers are able to offer skills training sessions at local educational institutions. They can also participate in career events and industry conferences, allowing them to better attract young, skilled workers. SDS operates the program in partnership with Developing the Young Workforce (DYW), a training and engagement organization with local chapters around Scotland (Skills Development Scotland 2020k).

6.2.2.12. The Public Sector Network

The public sector accounts for roughly 20% of jobs in Scotland. But older generations are overrepresented in the public sector, meaning public agencies face a challenging prospect of maintaining their staffs as employees begin retiring. The Public Sector Network, a Joint Initiative of SDS and the Scottish Government, was created in March 2015 to tackle the twin challenges of an aging public sector workforce and underemployment among Scotland's youth. The Network seeks to foster skills and desire to work in the public sector among youth under the age of 25. It does so through a wide variety of highly localized programs, including training courses, jobs fairs, and

career guidance. In June 2017, it added a Steering Group to identify broad obstacles to public sector employment and work with agencies to address these issues (Skills Development Scotland 2020).

7. City Region Deals

7.1. Overview

City Region deals (also called “City Deals”) are bespoke agreements between the UK Central Government and local governments to promote economic growth and opportunities in and around the UK’s major cities. Each deal details long-term growth strategy for a particular city, backed by funding commitments from the UK Central Government and a host of local government agencies (Ward 2020b).

The City Region Deals builds on the framework established by the 2011 Localism Act. The Act’s “Core Cities” Amendment provided the possibility for local governments to assert greater authority over planning and financial matters by having them submit economic growth plans to the central government and then negotiating over implementation responsibility (UK Parliament 2011). The white paper “Unlocking Growth in Cities” (published later in 2011) expounded on this notion, emphasizing the need for locally-tailored economic development strategies as a way to combat increasing regional disparities. The paper called for a series of “city deals” in which the central government would provide funding and decision-making powers to local authorities in return for specific funding and development commitments on the part of the local governments (UK Government 2011). The paper envisioned that such deals would open the door to more effective local governance, greater investment flows to small businesses, and ambitious new infrastructure projects.

Building on the recommendations of “Unlocking Growth in Cities,” the UK Government launched a first wave of city deals in December 2011. By July 2012, local governments representing each of England’s eight largest cities outside London had negotiated and signed city deals with the UK Government. A Cabinet Office publication later that year projected that these eight city deals would create 175,000 jobs and 37,000 new apprenticeships over the next 20 years (UK Government 2012b). Contained within these deals were measures to, among other things:

- Provide cities tax relief in return for meeting certain growth milestones;
- Grant local governments the autonomy to create growth funds to reduce reliance on the central government for major infrastructure projects;
- Establish local skills building and workforce development programs;
- Provide SMEs with incentives to take on apprentices;
- Create a local venture capital fund that would match national contributions to high tech;
- Extend national funding for local broadband access programs;

- Create joint local and national investment programs to incentivize housing development in economically distressed areas;
- Spur local investment programs in low-carbon industries; and
- Increase direct participation in local government and make governance structures more accountable to citizens and businesses.

Building on the enthusiasm undergirding the first wave of city deals, the UK Government launched a second wave of city deals in October 2012, aiming to cover the next 14 largest cities in England, as well as the 6 cities with the fastest-growing populations. By July 2014, 18 of the 20 cities had agreed to city deals with the central government; the other two incorporated their plans into less comprehensive “local growth deals.” The Second Wave of deals largely mirrored the first wave in its structure but engaged a broader array of actors in the negotiations (Ward 2020c). Whereas the first wave of deals represented the UK Government, the city council and the Local Enterprise Partnerships (see Box) of the target city, the second wave included the governments of nearby towns, as well as local business partnerships and universities. The Wave Two city deals were typically signed by anywhere from four to twelve parties (Centre for Cities 2014).

The year 2014 also saw the City Deals program expand beyond just England. In August, the UK Government negotiated and approved the “Glasgow and Clyde Valley City Deal,” an agreement between the UK Government, the Scottish Government, and eight local authorities across the City of Glasgow and the surrounding Clyde Valley. Between August 2014 and June 2016, five other Scottish cities signed deals with the central government. Each of these deals included local authorities, the UK government, and the Scottish Government; in Scotland they were referred to as “City Region Deals,” reflecting their coverage of surrounding regions as well as the cities themselves (Ward 2020c).

Between March 2015 and March 2017, two Welsh cities (and their surrounding regions) signed city region deals with the governments of the UK and Wales. As of spring 2019, two cities in Northern Ireland had begun negotiations with the governments of the UK and Northern Ireland over city region deals, but neither has yet reached an agreement. Thus, as of fall 2020, the UK Government has approved a total of 34 City Region Deals, with a further two in ongoing negotiations. The deals span time periods from 10 to 30 years each (Ward 2020c).

7.2. Mechanisms and Implementation

7.2.1. Administrative Structure

Cooperation between the central government and local authorities has long been a feature of UK governance, but city region deals represent a more expansive form of cooperation than what existed previously. Whereas previous agreements had seen the central government provide funding for specific projects proposed by local governments, city region deals empower local governments to take ownership over

regional development, backed by funding and administrative support from the central government (UK Government 2012b).

In each wave of city region deals, the central government indicates which cities are eligible to negotiate a deal. City councils for eligible locations then signal their intention to pursue a city region deal in that year's city budget. Then the city government collaborates with local stakeholders to develop a list of proposals for economic development in the "functional economic area" (essentially the city and its surrounding area). Each proposal includes a detailed funding scheme outlining financial commitments from both central and local governments. The proposals, once finalized, are converted into a terms sheet over which the central government and the city council negotiate. Once the parties have agreed to mutually acceptable terms, they collectively set out milestones and metrics against which to track progress. (UK Government 2011)

Within the UK government, responsibility for negotiating the city region deals initially fell to the Cities Policy Unit, an agency housed in the Cabinet Office and staffed with officials from the Department for Communities and Local Government and the Department for Business, Innovation, and Skills. In 2014, the Cities Policy Unit became part of the larger Cities and Local Growth Unit (also within the Cabinet Office), which oversees central government interaction with local economic development policies. After negotiating the city region deals, the Unit coordinates activities between different departments to efficiently deliver on the central government's commitments and generally serves as a centralized point of contact for local officials. City region deals draw funding and expertise from a total of eight different departments within the UK Government (UK Government 2011).

The central government committed a total of £2.3 billion over 30 years for the Wave One city deals and £1.5 billion for the Wave Two city deals (National Audit Office 2015; UK Government 2012b). It committed a further £548 million to the city region deals in Scotland – supplemented by £1.3 billion from the Scottish Government – and £616 million to the city region deals in Wales – supplemented by £625 million from the Government of Wales (Scottish Government 2020a; Ward 2020c). The two deals in Northern Ireland, which have yet to be signed, include a total UK Government commitment of £400 million and a £400 million commitment from the Government of Northern Ireland (Ward 2020c).

In order to reach an agreement with the central government, local authorities are required to commit funding of their own. Funding from the central government is usually matched at 75% to 300% by local sources, including local governments, universities, and regional organizations (Ward 2020c). The deals also seek to leverage private investment several times in excess of public funding.

7.2.2. Programs and Beneficiaries

There are currently 34 city region deals in effect, covering the largest cities in England, Scotland, and Wales, along with their proximal economic regions. Specific details of

all of them are beyond the scope of this report. However, specific attention is given below to the deals covering the UK's former coal communities. Here, we detail the major components of the city region deals for Leicester and Leicestershire; Preston, South Ribble, and Lancashire; Coventry and Warwickshire; Bristol; Stoke-on-Trent and Staffordshire; and Edinburgh and Southeast Scotland. While none of these plans specifically mention a transition away from coal, all seek to address the consequences of the decline of coal mining, including youth unemployment, a lack of skilled workers, low investment into SMEs, and insufficient infrastructure.

7.2.2.1. Leicester and Leicestershire

Enacted in March 2014, the Leicester and Leicestershire City Deal was an agreement between the UK Government and the Leicestershire City Council, the Leicester and Leicestershire Enterprise Partnership, the Blaby District Council, the Charnwood Borough Council, the Harborough District Council, the Hinckley and Bosworth Borough Council, the Melton Borough Council, the North West Leicestershire District Council, and the Oadby and Wigston Borough Council. At the signing of the deal, Leicestershire was losing jobs at nearly twice the national rate, faced high youth unemployment, and challenges supporting its small businesses. The City Deal sought to jump-start growth by:

- Enacting a new youth employment program;
- Creating a regional supply chain initiative to reduce costs for SMEs;
- Constructing a new Advanced Technology Center at Loughborough University; and
- Establishing a network of business support programs to ensure local SMEs are able to maintain and create jobs.

In all, the deal requested £16.3 million of central government funding to enact the programs contained within the deal, as well as expertise from government specialists to implement the business support programs. In response, local authorities committed £19.6 million. The deal projected a further £103 million of private investment (UK Government 2014b).

7.2.2.2. Preston, South Ribble, and Lancashire City Deal

The Preston, South Ribble, and Lancashire City Deal was approved in March 2014 by the UK Government; the Local Authorities of Preston, South Ribble, and Lancashire; and the Lancashire Local Enterprise Partnership. The Deal notes the challenges of “economic restructuring” and “heavy job losses in traditional industries,” of which coal mining is one. To revitalize the local economy, the deal proposes:

- A £334 million Infrastructure Delivery Program to enable the construction of highways, health facilities, housing, and schools; and

- A £100 million Investment Fund to be co-invested in housing and development schemes in the region.
- A series of major infrastructure projects to improve the region's connectivity

The Deal requests £87.8 million from the UK government, as well as the transfer of various planning responsibilities to the local governments. In return local authorities commit £390 million to the plan over 10 years. The authors of the deal predicted it would leverage £2.3 billion in private investment (UK Government 2013b).

7.2.2.3. Coventry and Warwickshire City Deal

The Coventry and Warwickshire City Deal, covering much of the Midlands Coalfields area, was signed in December 2013 by the UK Government, the Coventry and Warwickshire Local Enterprise Partnership, the Coventry City Council, the Warwickshire County Council, the North Warwickshire Borough Council, the Nuneaton and Bedworth Borough Council, the Rugby Borough Council, the Warwick District Council, the Stratford-on-Avon District Council, and the Hinckley and Bosworth Council in Leicestershire. The deal focuses on bolstering the region's manufacturing and engineering sector. Included in the deal are measures to:

- Co-locate local business support agencies in a "Clearing House Centre";
- Expand the automotive sector's research and development facility in Warwickshire;
- Institute supply chain initiative to support SMEs in the Midlands; and
- Create two new skills programs to meet the needs of the manufacturing sector.

The Deal requests £9.1 million from the UK Government, as well as elimination of certain bureaucratic hurdles to local development projects. Local authorities committed to providing £16.7 million and expect to leverage a further £66 million in private sector investment (UK Government 2013a).

7.2.2.4. Bristol City Region City Deal

The City Deal for the Bristol City Region was signed in July 2012 by the UK Government, the Bristol City Council, the Bath and Northeast Somerset Council, the North Somerset Council, the South Gloucestershire Council, and the West of England LEP. The Deal outlined an ambitious vision for the region's economic growth, backed by a strategy of robust investment and public-private partnerships. The Deal outlined measures to:

- Create an Economic Development Fund with the proceeds of local income taxes;
- Devolve transportation planning to local authorities to spur investment;
- Create a People and Skills Program to improve workforce development among the

region's youth;

- Align regional investment in SMEs through a new City Growth Hub; and
- Provide for efficient use of public assets by establishing a Bristol Public Property Board.

The Deal requests £83 million from the UK Government, along with devolution of planning authority to local councils and corporate tax relief worth roughly £450 million. Local authorities committed £335 million to the plan and expected to leverage roughly £1 billion in private investment (UK Government 2012a).

7.2.2.5. Stoke-on-Trent and Staffordshire City Deal

The Stoke-on-Trent and Staffordshire City Deal was signed in March 2014 by the UK Government with the Stoke-on-Trent City Council, the Staffordshire County Council, and the Stoke-on-Trent and Staffordshire Local Enterprise Partnerships. The Deal focuses on building sustainable local energy systems, clarifying supply chains, strengthening local planning, and improving workforce development programs. The deal included:

- The construction of a municipal geothermal heat network;
- The creation of a Smart Energy Network Demonstrator at Keele University to institutionalize the testing and evaluation of new low carbon energy sources;
- Two business support programs to help SMEs commercialize new technologies and retain jobs;
- Accelerated development on six greenfield and brownfield sites; and
- A pilot of an Advanced Manufacturing Training Hub.

The Deal requests £30.9 million from the UK government, as well as expedited approval of certain development projects and additional procurement support. In return, local authorities committed £48.2 and planned to leverage a further £233 million in private investment (UK Government 2014a).

7.2.2.6. Edinburgh and South East Scotland City Region Deal

The Edinburgh and South East Scotland City Region Deal was signed in July 2017 by the UK Government, the Government of Scotland, the East Lothian Council, the Edinburgh City Council, the Fife Council, the Midlothian Council, the Scottish Borders Council, the West Lothian Council, and the HE/FE Consortium. The Deal sought to reduce child poverty, upskill the region's workforce, improve infrastructure and housing, and provide new jobs. To this end, it included measures to:

- Create industry-specific research and development hubs;
- Jump start housing projects on seven different sites;

- Improve the region's highway system;
- Build a new concert hall in Edinburgh; and
- Institute an Integrated Regional Employability Skills Programme.

The Deal requested £300 million each from the UK and Scotland Governments. Local authorities committed a further £730 million (UK Government 2017).

8. Scottish Just Transition Commission

8.1. Overview

The Just Transition Commission is a temporary evidence-gathering and recommending body created to help Scotland ensure that its climate change mitigation measures are paired with policies that ensure equity and economic opportunity. The Commission convened for the first time on January 31st, 2019 and plans to present its final report to Scottish Ministers in January 2021 (Just Transition Commission 2020c).

8.2. Mechanisms and Implementation

8.2.1. Administrative Structure

The Scottish Government established the Commission non-statutorily (meaning without explicit legislative approval) to “provide independent advice to Scottish Ministers on the long-term strategic opportunities and challenges relating to the transition to a net-zero economy” (Just Transition Commission 2019a). The Commission was given two years to provide the Ministers with a written report detailing practical recommendations for ensuring that Scotland achieves a just transition to carbon neutrality. The Commission was tasked with developing its own work plan and conducting “meaningful engagement with parties likely to be affected by, and contribute to, the transition to a net-zero economy” (Just Transition Commission 2019a).

The Just Transition Commission is composed of 13 members, including CEOs of major fossil fuel and chemicals companies, union leaders, energy and policy researchers, environmental nonprofit executives, and leaders of Scottish public agencies (Just Transition Commission 2019d). Members were instructed to act as representatives of their various organizations, thus incorporating the interests of labor, industry, government, environmental nonprofits, and Scottish communities into the planning process (Just Transition Commission 2019a). The Chair of the Commission is Jim Skea, a professor of sustainable energy at Imperial College London and a member of the International Panel on Climate Change (IPCC) (Just Transition Commission 2019d).

The Commission receives a minor amount of funding and administrative support

on an as-needed basis from the secretariat of the Climate Change Division of the Scottish Government. However, the Commission remains independent of the Scottish Government, meaning work plans, consultations, and reports are all drafted without input from the Parliament. The Commission's reports are submitted to the Cabinet Secretary for Environment, Climate Change, and Land Reform; the Cabinet Secretary for Finance, Economy, and Fair Work; and the Cabinet Secretary for Communities and Local Government (Just Transition Commission 2019a).

8.2.2. Programs and Beneficiaries

In keeping with its planning policies and its reporting obligation, the Just Transition Commission has produced three reports and commissioned one external report. It has also published records of its meetings and its stakeholder engagement process.

8.2.2.1. Background Report

The Just Transition Commission began its work by producing an 80-page “Background Report” on the need for a just transition in Scotland. The report synthesized publicly available data regarding population, labor market, industry, household income, skills, and greenhouse gas emissions. It also projected such datasets out to 2050 to anticipate future needs (Just Transition Commission 2019b).

The report was designed merely to serve as an evidence base for transition planning; as such it offered no recommendations for policy makers. It did, however, highlight aging population, increasing labor demand, declining manufacturing, slow GDP growth, increasing inequality, digitalization, and ambitious greenhouse gas targets as key challenges for the Just Transition Commission to consider (Just Transition Commission 2019b).

8.2.2.2. Interim Report

On February 27, 2020, the Commission published a 40-page “Interim Report” summarizing the Commission's progress, highlighting the need for planning, laying out the results of its community engagement process, and outlining next steps (Just Transition Commission 2020c).

The Interim Report commended the Scottish Government on its ambitious climate action goals but noted the need for a detailed roadmap to meet these targets, saying “clear transition plans need to be developed for individual sectors if Scotland is to capture the economic and social opportunities on offer from the move to a net-zero economy.” The report highlighted the importance of stakeholder engagement in crafting these plans. A broad public dialogue would help planners “think in a more systematic way about how communities may be impacted across the country,” and would generally expand public buy-in to the transition process. The report stressed the importance of approaching decarbonization through an equity lens, ensuring that “the benefits of climate change action are shared widely, while the costs do not unfairly

burden those least able to pay.” To this end, the report recommended that the Scottish Government incorporate equity considerations into all levels of the policymaking process. Lastly, the report emphasized the need for imminent action. It recommended 12 near-term actions for the Scottish Government to take immediately that would ensure the ongoing decarbonization of Scottish society would not cement unjust social and economic dynamics. The report closed with a “call for evidence” requesting further public input on its recommendations for the final report (Just Transition Commission 2020c).

8.2.2.3. Advice for a Green Recovery

In response to the outbreak of the COVID-19 pandemic in early 2020, the Cabinet Secretary for Environment, Climate Change, and Land Reform requested that the Just Transition Commission provide recommendations for how Scotland could structure its economic recovery in a manner that is consistent both with its climate change goals and the principles of a just transition. On July 30, 2020, the Commission responded with a 24-page report detailing the impacts of COVID-19 on the just transition process, as well as priorities and recommendations for a “just green recovery” (Just Transition Commission 2020b).

The report stressed the danger the pandemic posed to decarbonization and just transition. The Commission found that the pandemic and the subsequent path to recovery posed a particular threat to young people, the transport industry, the oil and gas sector, and rural areas. Accordingly, it provided six recommendations to the Scottish Government: (1) boost investment in warmer homes, (2) invest in public buses, (3) support employment in rural habitat restoration programs, (4) create new jobs for oil and gas workers, (5) provide training programs for young people to enter into a net-zero job market, and (6) condition public funding on meeting just transition objectives (Just Transition Commission 2020b).

8.2.2.4. Just Transitions: A Comparative Perspective

In April 2019, the Commission proposed a report comparing just transition policies in different countries around the world. The goals of this report were to (1) explore how other governments have approached their own just transitions, and (2) to examine the efficacy of these different approaches, drawing out lessons for its own work. It engaged Dr. Annabel Pinker, a researcher at the James Hutton Institute, to produce such a report (Pinker 2020).

Pinker’s 74-page report, which was published in August 2020, examines just transition policies in the U.S., Canada, Peru, Norway, and Germany. The report touches on several extractive industries, including coal, forestry, and oil and gas. It finds significant deficiencies in each country’s approach to transition policy and produces a list of 10 major recommendations (with additional sub-recommendations) for the Just Transition Commission to consider when drafting its final report. The recommendations focus in particular on planning and investment, engagement, and policy development (Pinker 2020).

8.2.2.5. Community Engagement Reports

Since convening for the first time in January 2019, the Commission has conducted nine separate community engagement sessions, reports of which are published on its official website. Early meetings typically focused on one particular stakeholder and were conducted on-site. One meeting, for example, was held at the Rumbletonrig Farm to discuss sustainable agriculture to enhance resilience among Scotland's farmworkers. Other meetings addressed the oil and gas workers' union, a young professionals network, community leaders at a former coalfield town, a utility company Aberdeen, and a city council in a town dependent on heavy industry. More recent engagement events have consisted of open community consultations, with the Commission accepting recommendations from businesses, NGOs, and regular citizens (Just Transition Commission 2019c).

8.2.2.6. Meeting Papers

The Commission regularly publishes reports on each of its meetings to maintain transparency over the direction of its planning process. These reports include evidence reviews, future plans, and action items discussed at each meeting. Thus far, the Commission has published eight such reports (Just Transition Commission 2019e).

9. The Well-being of Future Generations (Wales) Act, 2015

9.1. Overview

The Wellbeing of Future Generations (WFG) Act, passed in 2015, is a wide-reaching law designed to promote sustainable development in Wales. The Welsh Parliament passed the Act in response to almost a decade of growing public concern over Wales' contribution to and risk from climate change. In 2007, the World Wildlife Fund's "One Planet Wales" report stated that if every country consumed natural resources at the rate Wales did, it would require three planets to sustain the human population, causing some in the Welsh public to call for climate action at a national level. At the same time, the United Nations was actively engaged in planning the successor to the Millennium Development Goals, ultimately codifying its guidance in the 2010 Sustainable Development Goals (Messham and Sheard 2020). The Welsh Government was required by the 1998 Wales Act to publish periodic reports and strategies for sustainable development, but many government officials had become frustrated at the lack of action on this front (Wales National Assembly 1998).

The true trigger for the WFG Act occurred in 2010, when the UK government terminated its Sustainable Development Commission, in doing so cutting off funding for some Welsh sustainable development projects. In Wales, where public support for climate action was greater than in the other parts of the UK, pressure increased on the

government to take sustainable development into its own hands. Responding to this pressure, Jane Davidson, the Minister for Environment, Sustainability, and Housing, succeeded in incorporating sustainable development goals into the Labour Party's 2011 manifesto. Leaving office shortly after, she left it to her colleagues in government to act on the manifesto. Later that year, work began in the Welsh Parliament on what became known as the Sustainable Development Bill (Messham and Sheard 2020).

In an effort to live up to the community engagement principles espoused in the bill, public officials embarked on a consultation process called the “The Wales We Want” Campaign, in which they gathered input from almost 7,000 Welsh citizens and groups. In response to the public comments, ministers shifted the focus of the bill more towards human well-being. The bill was also renamed the “Well-being of Future Generations Act”; the term “well-being” was seen as having less political baggage than “sustainable development.” Environmental groups protested that this shift came at the expense of including strict emissions reductions targets but succeeded in including such measures in the 2016 Environment (Wales) Act (Messham and Sheard 2020).

The passage of the WFG Act required support from many ministers, and the process of garnering this support has been described as a “baton in a relay race” (Messham and Sheard 2020). Essentially, the bill moved from ministry to ministry, with each minister adding components to benefit his or her purview. The result was a wide-ranging bill that committed to sustainable development in a host of different fields. This process succeeded in gaining the bill support in the National Assembly and in 2015 the WFG gained Royal Assent to become law.

The Act defines sustainable development as “the process of improving the economic, social, environmental and cultural well-being of Wales by taking action... in a manner which seeks to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs” (Wales National Assembly 2015). To this end, the Act outlined seven goals for sustainable development:

1. A prosperous Wales, in which a sustainably growing economy provides gainful employment to all who seek it;
2. A resilient Wales, in which healthy ecosystems are able to withstand economic growth and climate change;
3. A healthier Wales, in which mental and physical well-being are maximized;
4. A more equal Wales, in which success does not depend on a person's background;
5. A Wales of cohesive communities, in which community ties are nurtured;
6. A Wales of vibrant culture and thriving Welsh language, in which the protection and growth of Welsh culture is a priority; and
7. A globally responsible Wales, in which Wales does not cause undue harm to the

global environment.

The WFG Act is described as “An Act of the National Assembly for Wales to make provision requiring public bodies to do things in pursuit of the economic, social, environmental and cultural well-being of Wales in a way that accords with the sustainable development principle” (Wales National Assembly 2015). To this end, it requires the following:

- All Welsh public bodies must set regular “well-being” objectives that promote the aforementioned seven goals;
- All Welsh public bodies must evaluate new policies and resource uses for their impact on future generations’ well-being, and take all possible measures (including cross-departmental collaboration) to prevent problems from occurring in the future;
- The Welsh National Assembly must publish an annual “Well-Being Report” assessing progress on a list of predetermined well-being indicators.;
- The Welsh National Assembly must publish an annual “Future Trends Report” predicting future trends in the economic, social, cultural, and environmental well-being of Wales;
- The Welsh Auditor General may examine public bodies’ compliance in pursuing sustainable development;
- A Future Generations Commissioner role is created, with the duties of advocating on behalf of future generations, assisting government bodies with sustainable development, reviewing public bodies’ success in promoting sustainable development, overseeing the aforementioned reports, and facilitating collaboration between public bodies to achieve sustainable development goals; and
- Public Service Boards, consisting of local government officials, are created in each county in Wales and directed to coordinate and tailor public services to promote sustainable development in their region through local well-being plans.

9.2. Mechanisms and Implementation

9.2.1. Administrative Structure

The chief responsibility for implementing the WFG Act falls to the Future Generations Commissioner, who oversees planning, reporting, and coordination among the government bodies covered under the Act (Wales National Assembly 2015). The Commissioner is appointed by a cross-party panel of ministers in the Welsh

Government and is assisted by a staff of over 30. The Office of the Commissioner operates independently of the rest of the Welsh Government but receives annual funding from it. The first Future Generations Commissioner, Sophie Howe, was appointed in February 2016 and remains in the position today (Messham and Sheard 2020).

The planning, evaluation, and reporting requirements under the act apply to a total of 44 Welsh public bodies; these “public bodies” include (among others) local governments, public libraries, public museums, national parks, health services, and national ministries. The Act also created Public Service Boards in each of Wales’ 19 counties, through which the Office of the Future Generations Commissioner is able to provide local support. The Public Service Boards receive annual funding packages from the Welsh Government (Future Generations Commissioner for Wales 2020).

The most recent “Future Generations Report” from the Commissioner suggests that implementation of the WFG act has been mixed. Some of the 44 bodies subject to the Act have seamlessly integrated the planning and reporting into their operations, while others have balked at what they perceive to be onerous requirements. The agencies were required to publish their first “well-being objectives” by April 2017. Their first “assessments of well-being” were due by May 2017, and their first “well-being plans” were due by May 2018. The fact that the first well-being assessments were due prior to the first well-being plans was incidental to the timing of the Act but nonetheless cause some consternation among the agencies; this is not expected to be a problem in the future. The Future Generations Report noted that the Act had spurred knowledge sharing across government agencies, an increase in long-term planning, an emphasis on ‘preventive’ (rather than ‘reactive’) problem solving, an increase in public consultation, and some agencies incorporating the seven well-being goals into new project proposals. The report noted, however, that preventive problem solving was treated largely as an additional activity rather than a replacement for reactive problem solving. Likewise, collaboration across agencies had not yet included resource pooling, public consultations did not reach sufficiently diverse groups, agency workforces had not been incorporated into the well-being goals, and much of the progress towards the well-being goals came from agencies retroactively justifying projects rather than incorporating the goals into project planning. Overall, there was a misalignment between the Act’s emphasis on long-term planning and the general short-term incentive structure of governing, including election cycles, annual reporting, and annual funding (Future Generations Commissioner for Wales 2020).

The 19 Public Service Boards around Wales have likewise demonstrated progress despite growing pains. The Boards consist of representatives of the county government, the local health board, the local fire department, and the local arm of the Welsh environmental protection agency. They may also include, on invitation, Welsh Ministers, police chiefs, and a representative of local nonprofits. They receive annual funding packages from the Welsh Government. The Boards faced challenges initially due to the lack of clarity regarding their relationship with other public organizations. These challenges have since eased somewhat as the Boards have established themselves. The Future Generations Report found that most Boards lacked the funding and flexibility they needed to exercise their functions. Nevertheless, Public

Service Boards across Wales note several accomplishments since being established, including projects related to community development and food assistance (Future Generations Commissioner for Wales 2020).

10. Prosperity for All: A Low-Carbon Wales

10.1. Overview

“Prosperity for All: A Low Carbon Wales” represents the most detailed and comprehensive plan yet for Wales’ transition to a sustainable economy.

The statutory basis for the “Prosperity for All” Plan comes from the 2016 Environment (Wales) Act, which called for Wales to reduce its greenhouse gas emissions by at least 80% below 1990 levels by 2050. The Act also set a host of interim requirements, including emissions reductions milestones, a series of five-year carbon budgets to ensure that these milestones are met, and accompanying “Low Carbon Delivery Plans” that lay out how to stay within the budget. The “Prosperity for All” Plan was the first of these low carbon delivery plans, designed to help Wales meet its 2016-2020 carbon budget and 2020 interim emissions target, as well as to set it up for success in its 2021-2025 carbon budget (Welsh Government 2019).

The Plan presents a cross-sectoral, specific plan for transitioning to a low-carbon economy, with 76 policies and 24 program proposals to enable such a transition. The policies are organized by sector and cover power, buildings, transport, industry, land use, agriculture, waste management, and F-gases. Policy mechanisms include research, funding, education, creation of advisory bodies, and direct emissions reduction activities. Each sector’s policies are paired with or incorporate measures to advance welfare and equity in the economic transition (Welsh Government 2019).

The plan was developed in accordance with the guidance of the Well-being of Future Generations Act, with a specific focus on integration and problem prevention. In constructing the plan, Ministers took a collaborative approach by (1) working with the Commissioner for Future Generations, (2) convening a Ministerial Task and Finish Group to make strategic decisions regarding cross-sectoral work, (3) convening a Programme Board to coordinate implementation of the plan across departments, (4) soliciting input from outside-of-government specialists, and (5) soliciting input from the general public. They also developed a “Well-being Matrix” tool to assess how the policies interact with the seven well-being goals set out in the 2015 Act. The results of this tool are displayed in a “Well-being” summary that relates how the policies for each sector contribute to these goals (Welsh Government 2019).

Policymakers situated the plan within a web of other Wales, UK, and EU climate policies and planning documents. In addition to drawing its statutory basis from the

Environment (Wales) Act, and its planning Process from the WFG Act, the Plan draws on the regulations set by the Carbon Accounting (Wales) Regulations 2018, the Climate Change (Carbon Budgets) (Wales) Regulations 2018, the Climate Change (Interim Emissions Targets) (Wales) Regulations 2018, the Climate Change (International Aviation and International Shipping) (Wales) Regulations 2018, and the Climate Change (Net Welsh Emissions Account Credit Limit) (Wales) Regulations 2018. The UK Committee on Climate Change provided guidance in the planning process, and emissions reductions are linked to the EU Emissions Trading Scheme and the UK Climate Change Levy (Welsh Government 2019).

10.2. Mechanisms and Implementation

10.2.1. Administrative Structure

The Prosperity for All Plan includes detailed policies to be adopted by the various ministries in the Welsh Government, but largely lacks funding and enforceability. A later report by the Future Generations Commissioner estimated that the cost of reaching the targets contained within the Environment Act would be 1-2% of Welsh GDP every year. Within the 2020-21 Wales Government Budget, it would cost £991 million to comply with the Prosperity for All Plan (Future Generations Commissioner for Wales 2019).

The implementation of the Plan falls to a variety of government ministries depending on their purview. Some policies, like power sector reforms and land use regulations, fall clearly under a specific purview, while others lend themselves to cross-departmental collaboration. The Programme Board set up in advance of the Plan's publication is charged with coordinating across governmental agencies to help with this process (Welsh Government 2019).

10.2.2. Programs and Beneficiaries

The Plan presents a cross-sectoral, specific plan for transitioning to a low-carbon economy, with 76 policies and 24 program proposals to enable such a transition. The policies are organized by sector and cover power, buildings, transport, industry, land use, agriculture, waste management, and F-gases. Policy mechanisms include research, funding, education, creation of advisory bodies, and direct emissions reduction activities. Each sector's policies are paired with or incorporate measures to advance welfare and equity in the economic transition (Welsh Government 2019).

A number of the policies and proposals included in the plan relate to what we would call a "just transition." Such policies are listed below:

Policy 3: Wales maintains three Regional Skills Partnerships (RSP), regional organizations tasked with aligning workforce development resources from the Wales Government with local needs. The Prosperity for All Plan required that each RSP

conduct a review of decarbonization-related workforce skills gaps in their region. The Plan also encouraged the RSPs to provide “re-skilling” services through apprenticeship programs, STEM education, and Working Wales, the government’s consolidated employability program.

Policy 12: The Plan called for a review of the Welsh school curriculum and an increased focus on instruction to prepare students for careers in emerging sustainable development fields. It also provides for the establishment of a new Centre for Climate Change and Social Transformations (CAST) at Cardiff University. CAST, funded with £5 million from the Welsh Economic and Social Research Council, studies the far-reaching impacts of climate change through an interdisciplinary lens. As part of its research, the Centre examines how social and economic structures can adapt to decarbonization, along with decarbonization’s effects on employment.

Proposal 2: The Plan calls for the creation of a “climate just advisory group,” which would study how government policies affect vulnerable communities and communities that rely on carbon-intensive industries. The group is to be comprised of representatives of heavy industries and citizen groups and will advise the Welsh Government on delivering employment opportunities and tackling inequalities in the process of decarbonization. Part of its mandate would include identifying unintended consequences of decarbonization.

Policy 16: The Prosperity for All Plan notes that stricter sustainability rules may incentivize price-sensitive businesses to offshore their operations. In response, it calls for incentives for these businesses to remain in Wales and adopt sustainable development practices. The Plan encourages using the Economy Futures Fund, which provides financial support to businesses in return for commitments from these businesses to lower their carbon footprint. The Plan also notes the need for resources from the UK Government to provide further incentives.

Policy 28: The Plan calls for phasing out all coal power plants without carbon capture technology. Of particular focus for this policy is the Aberthaw Power Plant in southern Wales, which accounts for 14% of all Welsh greenhouse gas emissions. The plant is expected to shut down by 2025 at the latest.

Policy 34: The Plan calls for greater input from the Welsh Government on decisions to build new power plants. In particular, it notes that all new power projects should be evaluated for their ability to provide “social and economic benefit” to the region. This methodology is already being applied the construction of the Wylfa Newydd Nuclear Plant.

Policy 37: As a way to increase penetration of efficient heating technology the Welsh Government launched the Warm Homes Program in 2011. Between 2011 and March 2018, the program invested over £240 million to install energy efficient heating for 45,000 low-income homeowners. The Prosperity for All Plan calls for an additional investment of £106 million between March 2018 and March 2021, including £24 million from the EU.

Policy 69: The Plan incorporates the activities of Farming Connect, a £28 million program to provide technical advice and tailored business support to farm owners seeking to adapt to the low-carbon economy. The program also includes a Demonstration Network that trials and demonstrates new technology and farming techniques. These policies are designed to help farmers who might otherwise be negatively impacted by more stringent land use regulations.

Policy 70: The Plan incorporates the activities of the Farm Business Grant Scheme, which provides farm owners with grants covering up to 40% of the total cost of new farm equipment to help them reduce their environmental impact. The program is designed to incentivize emissions reductions in the agricultural sector while easing farmers' transition to a low-carbon economy; the program has been funded with £40 million.

11. EU Cohesion Policy and EU Structural Funds

11.1. Overview

EU Structural Funds are supplementary funds provided by the European Union to member states to support economic development and social welfare. Established in the 1970's, the structural funds are divided into five separate funding streams: European Regional Development Fund (ERDF); European Social Fund (ESF); Cohesion Fund; European Agricultural Fund for Rural Development; and the European Maritime and Fisheries Fund (EMFF). Funds relevant to economic development in the UK are reviewed below in more detail.

EU Cohesion Policy makes up a small proportion of economic development investments in the UK. However, investments are concentrated often on large projects, in areas that have limiting funding at the national or UK level. For example, between 2000 and 2006 EU funds made up over 22 percent of total public investment in Wales. This reflects the goal of EU cohesion policy to redistribute wealth to underdeveloped regions in the union.

11.2. Mechanisms and Implementation

Administrative Structure

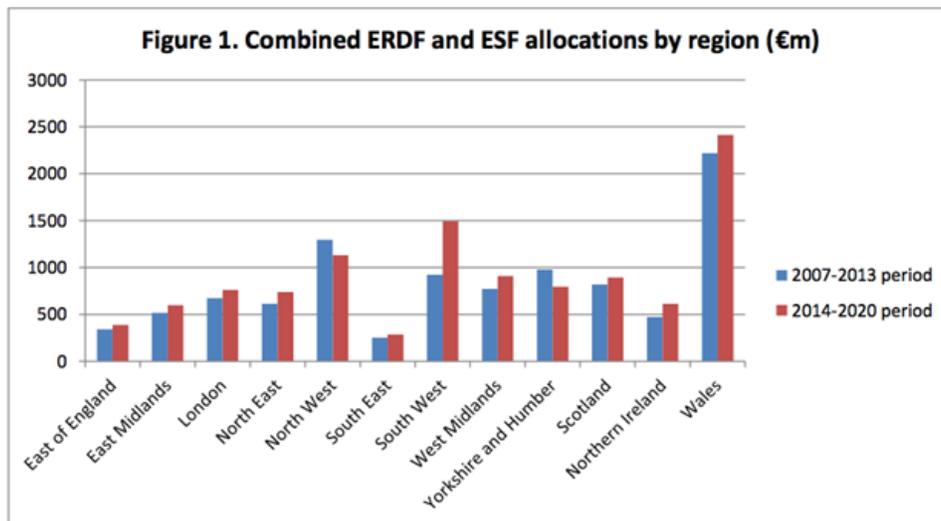
The UK Department for Business, Innovation and Skills (BIS) leads on European Structural and Investment Fund distribution (including ERDF and ESF) in the UK broadly. The Scottish and Welsh governments and the Northern Ireland Executive are

responsible for delivery of the ERDF and ESF in their respective nations . The delivery of the EU structural funds is a devolved responsibility (meaning it is administered at the national level).

The total EU structural fund budget was €639.4 Billion for the 2014-2020 period, of which €460 Billion come from the EU budget (the rest from national budgets), and of which €398 Billion were devoted to the ERDF and ESF. Specific projects to be funded are determined within the EU member state and the relevant region, but funding levels are determined by the EU's evaluation of need. In the UK, these responsibilities fell to the Regional Development Agencies prior to 2010, but have since been administered by Local Enterprise Partnerships.

The figure below shows the budget for the latest two rounds of funding for the two main programs that UK regions benefit from- the European Regional Development Fund, and the European Social Fund.

Figure 4. Combined ERDF and ESF allocations by region (€m)



Source: Brief24, Sheffield Political Economy Research Institute.

Qualified Participants & Programs

The EU identifies two primary beneficiaries of structural funds: ‘less developed regions’ (LDRs) and ‘transition regions’ (TRs). LDRs are defined as those with a GDP per capita less than 75 percent of the EU average. TRs have GDP per capita between 75 and 90 percent of the EU average. Of the 34 NUTS 2 regions in the UK, 22 are classified as ‘more developed’, 10 as ‘transition’ and only two as ‘less developed’ (Cornwall and the Isles of Scilly and West Wales and the Valleys). Wales receives the most funding of any UK region (as noted in the figure above).

A variety of organizations can seek EU ERDF or ESF funding through the LEPs in the UK: non-profits, local authorities, charities, higher education institutions, volunteer organizations, publicly funded bodies, or private sector businesses.

Most of the EU funding to the UK comes from the European Regional Development Fund and the European Social Fund. The European Agricultural Fund for Rural Development also supports development in the UK on a smaller scale.

European Regional Development Fund (ERDF)

The ERDF has a stated goal of “correcting imbalances between EU regions” regarding economic performance and social cohesion. ERDF funds provided by the EU must be matched by central government funds, local funds, or private/non-governmental funding sources. There are four main priorities for the ERDF projects: Innovation and research, support for small and medium businesses, digital upgrading, and supporting a low carbon economy.

These focus areas, or ‘thematic concentrations’ are important, but less developed regions have more flexibility to spend ERDF funds for other specific needs. In more developed regions (most of the UK) 80 percent of the funds need to go directly towards these goals. In transitioning regions, 60 percent of the funds need to address the fund targets. And for less developed regions (Cornwall and the Isles of Scilly, and West Wales and the Valleys) only 50% of funds need to be used on the strategic priorities.

The most recent period of funding provided € 3.6 billion to UK regions. Examples of UK projects funded in the most recent period include:

- Greater Manchester Fund of Funds (£60m in ERDF funding, total project budget £120m): This is a fund to support the delivery of economic development and low-carbon projects across Greater Manchester. The first investment supported Manchester Science Partnerships to co-finance Citylabs 2.0, an office and laboratory facility focusing on innovations in predictive and preventative medicine.
- Cornwall and Isles of Scilly Investment Fund (£32m in ERDF funding, total project budget £40m): Run by the British Business Bank (BBB), CIOSIF, provides commercially focused finance through a Debt and Equity Fund. The fund supports small to increase the economic growth in the region through local enterprise.
- The Mayor of London’s Energy Efficiency Fund (£43m in ERDF funds; total project budget £500m): MEEF is a newly established investment fund run by the Greater London Authority which will support London’s carbon emission reduction goals. It will provide support to the low-carbon, sustainable projects and infrastructure projects in London.

European Social Fund (ESF)

The ESF is focused more on benefits for individuals at risk of poverty, providing funds or improved education and employment opportunities. ESF funds provided by the EU must be matched by central government funds, local funds, or private/non-governmental funding sources. The ESF offers co-financing opportunities, so applicants can get up to 100 percent of their funding needs met through other organizations offering financial support. For example, The Skills Funding Agency, Big Lottery Fund and Department for Work and Pensions are all co-financing organizations that fund locally defined activities through a competitive grant process.

There are four main priority areas for ESF projects: workforce development, promoting social inclusion, education investments, and increasing effectiveness of public administration. Between 2014 and 2020, €80 billion has been budgeted for these activities across the EU, with an additional € 3.2 billion specifically budgeted for the Youth Employment Initiative. The UK allotment for ESF funding is € 3.5 billion between 2014 and 2020.

- The Youth Employment Initiative targets young people that have left education but are not employed or in a training program. It funds the provision of apprenticeships, job placements, and further education that could lead to job qualification. The total budget for the 2014-2020 period is €8.8 billion and complements other ESF projects and priorities.

Cohesion Fund

The Cohesion Fund targets EU member states whose gross national income per capita is less than 90% of the EU average. Generally speaking, it aims to reduce economic disparities for these regions. The UK does not qualify for cohesion fund support because of its income per capita. The Cohesion Fund distributes € 65.4 billion between two main categories :

- Trans-European transportation infrastructure projects
- Energy or transportation projects that clearly benefit the environment

European Agricultural Fund for Rural Development

The EAFRD is the funding instrument of the Common Agricultural Policy of the EU. In the 2014-2020 period the budget of the EAFRD is € 100 billion. This can be spent on programs started in the 2014-2020 period that run up until 2023. There are six priorities for the EAFRD funds:

- Facilitate information sharing and innovation in agriculture, forestry and rural areas
- Promote innovative and sustainable technologies
- Promote food chain organization, animal welfare, and risk management

- Promote resource efficiency
- Promote social inclusion, poverty reduction and economic development

In England the EAFRD funding is administered through the Growth Programme, which provides funding to help projects in England which create jobs and help rural economy growth. The Rural Payments Agency (RPA) manages the grants, working with Local Enterprise Partnerships (LEPs). LEPs give their recommendations to RPA who then decide which grants to make available in their area based on their local priorities.

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