### About Reimagining the Economy

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#### About the authors

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# Acknowledgments

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# RENEWING BRITAIN: NAVIGATING TRADE-OFFS IN THE UK'S GREEN INDUSTRIAL STRATEGY

Vidit Doshi and Huw Spencer Harvard University July 2024

## **Summary**

An unenviable industrial in-tray: The new UK government faces the task of developing a new green industrial strategy at the same time as accelerating growth in an economy that has experienced the second slowest recovery in the G7; creating well-paying jobs amid 15 years of wage stagnation; and enhancing national security through robust energy policies and supply chain resilience. We argue there are no 'Swiss Army Knives' in industrial strategy: each challenge requires its own policy tools.

Learning from the past: Case studies from the UK's wind energy and Germany's solar industries reveal that rapid deployment of green technologies can fail to translate into domestic job creation and local economic gains. There is a need for strategic, adaptive planning and careful analysis of the trade-offs involved when crafting industrial strategies. A good-jobs strategy should sit alongside the green and growth missions crafted by the new government.

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#### I. Introduction

The green transition has reenergized countries around the world to embrace a new industrial strategy. The US, the European Union, Australia, Japan and South Korea have all outlined strategies that champion green growth and economic security. The recent election of a Labour government suggests that the UK is about to follow suit. By proposing a new economic assertiveness of "securonomics", the new Chancellor Rachel Reeves has signaled a desire to oversee a more "active, strategic state".

This change in direction is timely. The UK has been caught on the backfoot, but now has the opportunity to craft an industrial strategy that is more patient and more strategic than many of its allies. The challenge is that political rhetoric surrounding the green transition often tries to be all things to all people. As Rachel Reeves noted in her first speech to Treasury officials, embracing a modern industrial strategy requires a serious discussion about the choices facing UK policymakers and the trade-offs involved.

Alongside achieving net zero carbon emissions, the new government will need to solve at least three interconnected challenges in the next decade:

Accelerating growth:

almost led to reopening CO2-intensive coal-fired power plants in the UK last year (Twidale 2023).

Despite being late to the party, the UK now has the opportunity to craft a smarter green industrial strategy that accounts for these trade-offs. Our core argument is this: there are no 'Swiss Army Knives' in industrial strategy that will solve all these problems at once; each objective will need its own toolkit.

Our paper is divided into three sections. First, we look at case studies of how countries have approached policy decisions related to the green transition in the past (wind and solar). Second, we look at what options the government faces for industries of the future (retrofitting homes and green steel). Finally, we argue that creating effective industrial strategies at the local, regional, and national levels will require a new framework for economic decision-making.

# II. Learning from past experiences

A. UK Wind

We do not need to look too far into the past to find examples of these trade-offs in practice.

development, is owned by non-UK entities including 40% that is directly owned publicly by foreign governments or their state-owned enterprises (Lawrence 2022).

The problem is that there is no guarantee these jobs will be good jobs. Given the tight UK labor market, absolute job creation numbers matter less than the quality and wages of jobs created through the green transition. The evidence around the green wage premium is mixed. Broome et al show that the green wage premium exists but has been declining, with jobs in skilled construction trades seeing their low-carbon wage premium declining to 5% in the 2018-2021 period (Broome et al. 2022).

One option for the UK government would be to prioritize its net-zero mission. This would entail targeted training programs to fill the skills gap, regulations to increase retrofitting demand, and subsidies for lowest-income households. The majority of costs would be borne by the private sector and individual households. But without a broader strategy to improve productivity levels in the construction sector, the UK government risks creating a new swathe of low-wage jobs that struggle to recruit and retain the workers n3 (r)-1 (d.3 (r TD(j)man)1 (ug)1 (t )!

produced with BF-BOFs by heating iron ore and coke at very high temperatures. This is highly carbon-intensive, leading to approximately two tons of carbon dioxide for every ton of steel (Nimbalkar 2022). In contrast, EAFs use scrap metal to produce lower grade steel with considerably lower emissions.

The UK has two BF-BOF sites, in Port Talbot and Scunthorpe, which produce 5.9 million tons of steel annually (Jozepa and Ward 2024). These sites contribute 95% of the emissions from UK steelmaking (Keep, Jozepa, and Ward 2023). In January, Tata Steel announced it was going to close its two BF-BOF sites in Port Talbot and shift to EAFs, underwritten with 500 million GBP of government subsidies (Sweney 2023). Unions estimate between 2,000 and 2,800 jobs will be lost in the region as a result.

There are broadly two decarbonization pathways the UK can adopt. The first is the model chosen de facto by the previous government. It involves shifting to a fleet of EAFs, closing the remaining BF-BOFs and importing all primary steel required for the automotive industry and other sectors. Paired with additional policies like Buy Clean and retrofitting, as well as a carbon border adjustment mechanism for st-3 (ns)1 ()-3 8-1 (s5 (s)1 (the)3 (B)-ul9 (s)2 d2 (ad)1 (d) ul9 (s)

Sabel and Victor point to the success of the Montreal Protocol in bringing about positive environmental outcomes, but we can also look to the techniques of DARPA, ARPA-E and the most successful Economic Development Organizations for examples of this approach in the US (Mazzucato and Wainwright 2024). Program managers in these organizations work to problem-solve collaboratively with firms, drawing on a range of public inputs, from

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