

# 7.1

## An Industrial Strategy at the Heart of a Green New Deal

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*"We choose to go to the moon...We choose to go to the moon in this decade and do the other things, not because they are easy, but because they are hard; because that goal will serve to organize and measure the best of our energies and skills, because that challenge is one that we are willing to accept, one we are unwilling to postpone, and one we intend to win..."* <sup>[1]</sup>

**President John. F. Kennedy, September 1962**

Fifty years ago, this year, much of the world celebrated as the first man walked on the moon. Despite complaints about the cost and value of the effort, rigorous planning, huge investment and significant collaboration and innovation across sectors from rocket science to nutrition saw the realisation of the bold mission set just seven years earlier by President Kennedy.

Today, instead of seven years to land on the moon, we have just over a decade to mitigate the worst outcomes of climate change, keep global temperatures within the 1.5 degree increase agreed in the Paris Accord and avoid wide-spread environmental collapse.<sup>[2]</sup>

As with the moon landing, we have in front of us a bold mission — ending climate change and reversing the decline in our environment. But doing so will require far more direction, resources and innovation than that needed for the moon landing. It will require a significant, and potentially unprecedented, redirection of the economy to deliver a green economic transformation.

A Green New Deal for the UK is, in principle, precisely that. It is an industrial strategy writ large – seeking not just to mitigate climate change but to unlock new opportunities for investment and innovation, tackle inequality, improve quality of life and deliver an environmentally sustainable economy.

### — An unsustainable economic model

Economic development in the age of industrialisation has brought about substantial advances in a whole host of economic and social outcomes. But these gains have been achieved at the cost of severe overexploitation of natural resources and unprecedented damage to the earth's environment. Humanity is now operating beyond its 'safe operating space', characterised by what are called 'planetary boundaries'. We are now approaching various ecological tipping points beyond which abrupt and irreversible environmental change at large geographical scale is likely to happen.

The UK's current economic model (and those of most countries around the world) run on unsustainable resource use.<sup>[3]</sup> Despite some recent progress, the UK government is set to fall well short of meeting its long-term commitments as set out in the Climate Change Act (2008) even though those targets were set on a more modest 80% reduction in emissions based on 1990 levels compared to the recently adopted net-zero emissions target.<sup>[4]</sup> Many of the UK's other environmental impacts are also unsustainable at a local and global level. According to work by the University of Leeds "A Good Life For All Within Planetary Boundaries" project, the UK is in breach of five of seven per capita "sustainability boundaries" which include CO2 emissions, freshwater use and ecological footprint.<sup>[5]</sup>

Yet, even were the UK economy environmentally sustainable, it displays a number of other structural weaknesses and fundamental problems. The UK has had a 'productivity 'gap' in comparison to many of its peers for decades.<sup>[6]</sup> Its economy is one of the most geographically imbalanced in the developed world<sup>[7]</sup> with nearly two fifths of its output deriving from London and the South East.<sup>[8]</sup> The UK has held a persistent trade deficit (exports minus imports) since the mid-1990s - driven by a significant and growing deficit in the trade of goods, with the UK now overly reliant on its service sectors for exports.<sup>[9]</sup> The UK also invests a lower percentage of GDP in research and development (R&D) than the majority of its competitors - totaling 1.69% of GDP in 2017, compared to over 4.2% in South Korea, over 4% in Japan and over 2.9 per cent in Germany.<sup>[10]</sup> These structural weaknesses sit alongside growing inequality, wage stagnation<sup>[11]</sup> and astonishing levels of poverty - 14 million people live in poverty in the UK.<sup>[12]</sup>

A new economic model is needed. This should be the overarching aim of a Green New Deal – an industrial strategy designed to change the structure of the economy to address its major shortcomings,<sup>[13]</sup> moving towards environmental sustainability, raising productivity, rebalancing the economy, reducing inequality and improving quality of life.

### — What is industrial strategy?

The purpose and content of industrial strategy has changed over time in accordance with evolving contexts. Often synonymous with policies to support industrial development,<sup>[14]</sup> but in some instances a targeted sectoral policy, the term now encompasses a broader set of economic policies to achieve a particular set of objectives and which need not be just economic but include social and environmental outcomes too.

Industrial strategy has historically comprised both ‘horizontal’ policies that are focused on the general economic and business environment (for example, regulation, taxation, and infrastructure) and ‘vertical’ policies that support particular sectors or firms (such as automotive, manufacturing or offshore wind).<sup>[15]</sup>

The history of industrial strategy in the UK has varied from the unhappy to a virtual abandonment, starting from the 1980s. Largely deemed to have failed in the 1970s in the UK,<sup>[16]</sup> a visible industrial policy only began to re-emerge following the global financial crisis. That is because for the three decades prior to the pre-financial crisis, policies focused almost exclusively on the supply side of the economy rather than demand. That approach was dominated by horizontal policies which focused on creating a positive business environment. Born from the longstanding orthodoxy that the direction of the economy is best left to market forces and government intervention kept to a minimum, it is an approach that has left the UK with the structural weaknesses already identified.

The recent shift in understanding and approach is a marker of the growing recognition that the weaknesses at the heart of the UK economy are structural rather than transitory and that the role of the state is crucial if we are to shift the economy in a new and sustainable direction.<sup>[17]</sup> The government’s industrial strategy, published in 2017, sets out five foundations<sup>[18]</sup> of economic policy, arguing that improving them will help tackle the ‘Grand Challenges’ facing the economy.<sup>[19]</sup>

The strategy is accompanied by the government’s Clean Growth Strategy, which seeks to minimise the costs of decarbonisation while maximising its socioeconomic benefits.<sup>[20]</sup>

Overall the strategy is a welcome recognition of the potential role of industrial policy. It moves beyond the idea of providing support for a few key industries alone and instead sets out a long-term plan for economic change.<sup>[21]</sup> But while the industrial strategy is a good start, it falls short in terms of its ambition, the policies which underpin it and — especially — the resources deployed by government to deliver the desired outcomes. Most importantly of all in this context, while clean growth is one of the ‘Grand Challenges’ identified, decarbonisation and tackling wider environmental breakdown are not embedded in the heart of the strategy in a way that is necessary if we are to bring about the fundamental structural shift in the economy that we require to successfully decarbonise the economy and reduce the UK’s other environmental impacts.

### — A new vision

Contrary to the orthodoxy that has dominated British policymaking for decades, the state has a fundamental role to play in setting the direction of an economy and coordinating economic activity – in truth there is little hope of achieving wider societal or environmental goals without it. It should do so by seeking to co-invest with the private sector to increase the total level of investment in the economy and directly promote demand.<sup>[22]</sup>

Doing so will require a shift from narrowly cast policies and initiatives and the belief that such green policies represent only a cost. Instead, it will require the recognition that the overall economic effect of decarbonising the UK economy is overwhelmingly positive<sup>[23]</sup> and there are many economic and social benefits to investing in a rapid transition to a green economy.<sup>[24]</sup>

In practice, this will require the integration of demand and supply – focusing on supply-side policies alone isn’t enough<sup>[25]</sup> –

working cross-sector, harnessing innovation and procurement and public and private actors.<sup>[26]</sup> This means fiscal policy must work alongside industrial strategy with the government significantly raising public investment in the economy.<sup>[27]</sup> Such an investment can ‘crowd’ in private sector investment ensuring that large funds will be invested into the green economy. The precedent for such investment includes President Roosevelt’s New Deal in 1930s America following the Great Depression.

This approach will also require public procurement policy to work with industrial strategy policy by helping UK businesses put themselves in the best possible position to supply the goods and services required to meet the demand created by public spending and policy.<sup>[28]</sup>

### — A mission-based approach

Much like the Kennedy-era mission of landing a man on the moon, tackling climate change and wider environmental breakdown requires a ‘mission-based approach’ to industrial strategy.<sup>[29]</sup> As Mazzucato and Willetts have argued, industrial strategy is most successful when it “galvanizes different actors and sectors across the economy to work together to solve problems” in the form of missions.<sup>[30]</sup> Of course, tackling climate change and delivering environmental sustainability is more complicated than landing a man on the moon – it will need greater cross-sector collaboration, innovation on a much larger scale, big investment as well as sweeping regulatory and behavioural changes.

The Grand Challenges set out in the government’s industrial strategy take us some way towards this approach. Yet all of the challenges are too broad to serve as actionable missions and counterintuitively the ‘Clean Growth’ challenge also suffers from the fact that it is cast too narrowly; focusing on clean growth alone rather than wider environmental issues. The Grand Challenges are underpinned by more specific missions, but many of them are spectacularly unambitious.<sup>[31]</sup>

To address this will require an expanded, mission-oriented green industrial strategy as argued for by IPPR in its Commission on Economic Justice. This will involve the refinement of all of the ‘Grand Challenges’ identified in the government’s industrial strategy but the focus here is on the environmental challenge. The government should adopt an ambition to secure environmental sustainability in the UK. In practice, this will require the adoption of a new grand challenge to reduce the UK’s environmental footprint to levels consistent with global sustainability no later than 2040.<sup>[32]</sup> This challenge should underpin the entire strategy.

The University College London (UCL) Commission on Mission-Oriented Innovation and Industrial Strategy (MOIIS) argues that each mission statement must be time-bound and include a deadline with a clear criterion or framework for success.<sup>[33]</sup> For the purposes of decarbonisation such a framework already exists. The Climate Change Act 2008 sets a statutory long-term goal of reducing UK greenhouse gas emissions by at least 80 per cent (on 1990 levels) by 2050 and requires it to be implemented through ‘carbon budgets’ which are set every five years, setting out a clear pathway for the overall goal to be achieved.<sup>[34]</sup>

To move as rapidly as is needed, the overall goal for decarbonisation will need to be updated in line with the governments legal commitment to pursue net zero GHG emissions by 2050 – if not well before. But to tackle the UK’s wider environmental impacts will require a framework that applies the principles of the Climate Change Act more widely. This should come in the form of a new Sustainable Economy Act which would set the UK’s environmental limits in law, establishing long-term goals to be met and providing pathways for them to be achieved through the creation of ‘environmental budgets’ modelled on the ‘carbon budget’ approach of the Climate Change Act.<sup>[35]</sup> The grand challenge to reduce the UK’s environmental footprint within the industrial strategy could then be measured against this framework.



In practice, the overall environmental grand challenge will need to be broken down into a series of missions and sub-missions to achieve the desired goals. Jacobs et al (2017) suggest breaking it into three parts but these would still require another series of sub-missions to make them tangible, measurable and achievable. Many examples of such potential missions are set out in the government's Clean Growth Strategy and its Environmental Plan.<sup>[36]</sup> An illustration of what the further sub-missions might look like are outlined below<sup>[37]</sup>:

- Decarbonisation, targeting the reduction in GHGs across all sectors e.g. transport, buildings, and industry.
  - \* For all new cars and vans to be effectively zero-emission in the UK by 2030 and deliver zero carbon emissions from road transport before 2040.
- The circular economy, focused on reducing the use of materials, their sustainable sourcing, and the elimination of waste.
  - \* To maximise the value and benefits we get from our resources, doubling resource productivity by 2030.
- Sustainable natural capital, covering the conservation and enhancement of habitats, species and landscapes and the maintenance of water, nitrogen and phosphorous cycles.
  - \* To restore the UK's biodiversity to a 1970 benchmark.

This framework effectively sets out the overall challenge of achieving environmental sustainability which would then be broken down through the creation of 'environmental budgets', then achieved through a series of environmental policies. It creates the future direction for demand thereby stimulating multiple sectors and actors to address the identified problems. In doing so the state

is taking a significant influencing role on the direction of future economic prosperity acting to shape the market.<sup>[38]</sup>

The targets and environmental policies must then be met on the supply side through a series of industrial strategy policies which may take the form of regulation, taxation, fiscal spending and infrastructure.<sup>[39]</sup> Some of the required measures are outlined in the government's Clean Growth Strategy<sup>[40]</sup> but in reality, many of the policies are either insufficiently ambitious or poorly resourced.

As argued by IPPR's Commission on Economic Justice, policies should be bound by two elements. Firstly, they should aim not to raise overall economic costs, but as far as possible to reduce them by encouraging innovation and shifts in demand. Second, they should also seek to maximise the domestic economic advantage of achieving environmental targets, in terms of UK-based output, employment and exports.<sup>[41]</sup>

### — Developing policy priorities

In practice an industrial strategy on the scale and ambition that is necessary would leave few areas of public policy untouched.<sup>[42]</sup> But there are a few key policy priorities that would be fundamental to delivering the structural economic change required.

### 1— Financing an environmentally sustainable economy

Delivering greater investment in low-carbon infrastructure and innovation, and the swift curtailment of investment in high-carbon infrastructure is essential to achieving the transition to a sustainable economy.<sup>[43]</sup> Such investment should also seek to rebalance the UK economy towards more productive economic activity<sup>[44]</sup> and geographically, ensuring that money and investment is spread across the country rather than focusing on London and the South East.<sup>[45]</sup>

The investment rate in the UK as a proportion of GDP has been consistently lower for decades than our main economic competitors. To overcome this there is an

overwhelming case for the establishment of a National Investment Bank (NIB). Such an institution should be modelled on successful public development banks in other countries such as Germany's KfW. The NIB would have a mandate to invest in particular fields and there should be a core focus on investments which help deliver the transition to an environmentally sustainable economy. Much of the funding for the NIB would come from public borrowing through a significant increase in annual public investment spending.<sup>[46]</sup>

Under the banner of the NIB, there is also a strong argument for creating a 'Green Innovation Fund' as proposed by the People's Policy Project.<sup>[47]</sup> It would focus on investments in low-carbon technologies and generate greater benefit for the public good by taking long-term equity stakes in the firms in which it invests.

### 2— Universal Sustainable Infrastructure

Ensuring that there is adequate investment in low-carbon infrastructure across the UK will be a core function of the NIB guided by the priorities set out in the industrial strategy. This will require a significant increase in the degree of the investment, public and private, in all forms of infrastructure.

But over and above the commitment to investment there is a need to ensure that everyone has access to high-quality and sustainable infrastructure in every place. The Industrial Strategy Commission recommended a commitment to "providing Universal Basic Infrastructure for all citizens in all places".

An industrial strategy as part of a Green New Deal should therefore include a commitment to Universal Sustainable Infrastructure. Such a commitment would include 'hard' infrastructure such as rail, energy and broadband but also 'soft' infrastructure such as high quality and universal health and education services. This would not only help achieve an environmentally sustainable economy by ensuring equal access to sustainable infrastructure, it would also help tackle wider

inequalities.

### 3— Regional powers and institutions

Action to achieve environmental sustainability must take place at every level. Each economic region should have the power to determine its own priority sectors in the low-carbon economy and the control over the resources needed to shape their regional economies in response to the challenge of achieving environmental sustainability. Part of the reason for a geographically imbalanced economy is that the UK is also one of the most centralised developed countries in the world.

The government's national industrial strategy has tasked combined authorities and LEPs with developing nationally compatible local industrial strategies, but these institutions are not given any formal devolved legislative or fiscal powers, and LEPs are fundamentally undemocratic.

Delivering this in practice will require the devolution of powers and resources to the regional and local level, as well as reforms to guarantee democratic institutions at all levels. These might include:

- National investment banks in Scotland (this is already being formed and will be operational in 2020), Wales, Northern Ireland and the English regions.
- A regional tier of economic governance (through the expansion of combined authorities) responsible for overall economic planning and industrial strategy, strategic planning, regional infrastructure and transport policy, and aspects of energy policy. This would involve the devolution of fiscal autonomy and powers to borrow for new investment.<sup>[48]</sup>
- The devolution of regional 'environmental budgets' that bind a region to deliver sustainability targets over a five-year period.
- Regional missions promoting certain technologies and systems<sup>[49]</sup>.



- Citizens assemblies that have a formal role in considering and agreeing priorities with direct linkages into the regional and local tiers of governance.

#### 4— A Just Transition

The international trade union movement developed the idea and practice of a ‘just transition’ which “provides and guarantees better and decent jobs, social protection, more training opportunities and greater job security for all workers affected by global warming and climate change policies”.<sup>[50]</sup> A Just Transition is essential to ensuring that the journey towards an environmentally sustainable economy is fair and just for all. Yet in practice the government has failed to position the concept of a ‘just transition’ within decarbonisation policy and industrial strategy.

In future, the concept of just transition must be placed at the core of national industrial strategy as well as the strategic economic plans and local industrial strategies. Involving trade unions in the process of determining just transition policy will also be crucial.

Supporting a ‘Just Transition’ will require the necessary institutions and resources. In practice two steps will be essential to this process. First, to create ‘Just Transition Commissions’ at the regional level, following Scotland’s example. These should involve all relevant stakeholders including metro mayors, local authorities, LEP representatives, local community representatives, local businesses, businesses interested in investing in the region, civil society and trade unions.<sup>[51]</sup>

The second will be to create and resource Just Transition Funds as part of regional economic development funding to help the drive towards a low-carbon economy and to mitigate against the negative impacts of decarbonisation. These funds might support the repurposing of existing carbon-intensive industries, the provision of large training and re-skilling programmes, and wage subsidies for those workers who may be made unemployed as a result of transition.<sup>[52]</sup>

#### — Conclusion

The window of opportunity to mitigate the worst outcomes of climate change and environmental breakdown is closing rapidly. We have a few more years than Kennedy gave the US to land on the moon but not much, and our task is considerably more complex, involves an unprecedented shift in the way we run our economies and societies and must begin immediately. But we don’t lack the resources, the technology or the ideas that we need to deliver an environmentally sustainable economy.

All that is really lacking is the political will. If we choose to end climate change, as Kennedy chose to land a man on the moon, we can make it so. We just have to choose to do so.





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