Making Green Work

Building a new green industrial strategy for the UK to 2030

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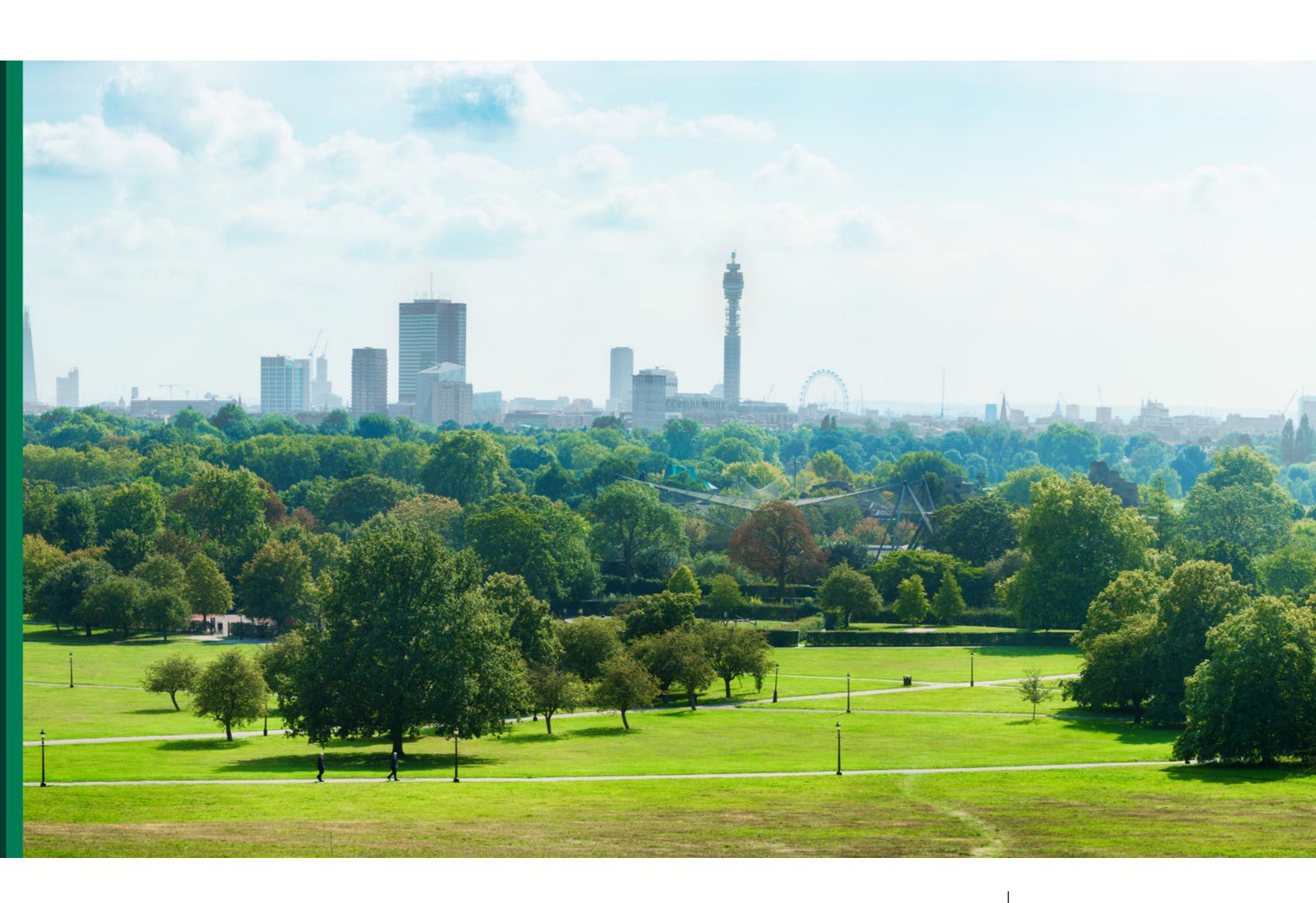## Building a new green industrial strategy for the UK to 2030

Introduction

In November 2020, the UK Government set out a Ten Point Plan for a Green Industrial Revolution with the approach they planned to take to 'build back better, support green jobs, and accelerate our path to net zero'. This provided a focus of ambition around the core sectors of energy, transportation and mobility, and the built and natural environments, alongside intent relating to carbon capture, usage and storage (CCUS) and green finance.

COP26 provided the platform to raise the critical need to speed up this agenda. But how do we all get there, and truly make green work for everyone? The decisions we make in the immediate term will be pivotal in delivering the scale of transformation needed to achieve the future vision and ensure the UK is on a net zero course. A successful green industrial strategy must deliver economically.

Through a series of Interchange events in 2021-2022 we have benefited from a range of perspectives on what a green industrial revolution means for organisations and individuals' and what challenges they are facing strategically and operationally to enact and enable critical change and maximise the benefit of associated investment and transformation.

Here we set out the recommendations for how some of the hurdles faced can be overcome, unlocking wider opportunity, and ensuring the green industrial revolution works for everyone.

1

Investing in the skills to support green jobs

What's the challenge?

Future employment will depend on being able to think, talk and act in a climate positive way. There are vast numbers of green jobs emerging, for example 400,000 new roles are expected to be needed in the energy sector by 2050 [Source: National Grid, The Net Zero Energy Workforce Report, January 2020] while 175,000 new jobs in the transport sector will be needed by 2035 [Source: Closing the UK's Green Skills Gap, Green Alliance, 2022] to meet 2050 net zero targets.

UNESCO data found only half of national education frameworks have a reference to climate change in them [Source: Stefania Giannini from UNESCO speaking at COP26]. Education needs to support all pupils to understand climate change and ensure that as citizens and consumers they make informed personal choices, understand the green opportunities available to them, and leave school ready to join and green the job market. The jobs of the future will be transformed by both climate and digital expectations.

However, The Green Jobs Taskforce notes there is a significant lag between industry identifying the need for skills, and training workers in those skills. 80% of the people who will be working in 2030 are already in the workforce [Source: Closing the Green Skills gap report, Green Alliance, 2022] so there is a very real need to develop training courses to ensure enough people with the right skills are available.

Many people will need to upskill their existing role or transition into a new role altogether. For example, in transportation there is a large skills gap within roles such as charge point installers and operators, vehicle scrappage and recycling experts, battery manufacturers and operators, and electrification engineers. These will need addressing if we're to resource these growing new technologies.

What steps could governments take?

What steps could businesses take?

2

Improving climate and environmental literacy

What's the challenge?

Environmental literacy is the awareness and concern about the environment and its associated problems, alongside the knowledge, skills and motivation to work toward solutions of current problems and the prevention of new ones [Source: NAAEE, 2004]. For many, understanding the nuances of this can feel quite daunting. The scale of the climate challenge can be described in technical and scientific language, often alienating those outside the industry.

If we want everyone to start understanding the scale of the problem, we need to make the relevant terminology accessible, in the hope that everyone will have the ability to acquire a basic standard of climate literacy. This will ensure everyone has an opportunity to make change through their workforce behaviour and ideas, consumer choices, and ability to influence others within society.

Over the past two years the UK has undertaken mass public education on COVID-19. There are lessons to be learnt from this about how a similar approach could be used to address the climate challenge.

Useful links:

- The Butterfly Effect

- Enjoyment to Employment | London Transport Museum (ltmuseum.co.uk)
  Partners: Siemens, Costain, Kusuma Trust, Mastercard, telent Technology Services, Thales, Transport for London

- Climate Crossroads | London Transport Museum (ltmuseum.co.uk)
  Partners: Mott MacDonald, Cubic Transportation Systems, Sopra Steria, Mastercard

- Jacobs Climate Solutions Accelerator course

What steps could governments take?

What steps could businesses take?

3

Making green decisions easier

What's the challenge?

While the green agenda has gained popularity in recent times, it's currently facing pressure from competing issues. There's a real risk that the whole agenda will be blown off course by the immediate cost of living crisis. How can we expect people to think about changing their habits when there are other very real issues like paying for heating and food?

People will make the right choices if it's easy and affordable for them to do so. Governments and businesses therefore have a responsibility to ensure greener choices become part of the normal landscape, and at the point consumers make decisions they can easily make a green choice that is convenient for them. The link must be made to promote world security, improve access to nature and health, amongst others.

While our attention may be directed elsewhere, making green work needs to remain a priority, and can in many ways help to build back better. There are 17 United Nations Sustainable Development Goals, and all are important. Action needs to take all of these into account to avoid achieving net zero 'at any cost'.

Useful links:

• Local Electric Vehicle Infrastructure Fund (LEVI)

What steps could governments take?

What steps could businesses take?

4

Understanding the climate risks

What's the challenge?

To avoid making green work is now a matter of risk. Reputational risk, risk of loss of value of investments, loss of opportunities created by failure to invest in low carbon or other sustainable product and service lines, and an inability to attract capital and finance for projects/businesses that don't meet enhanced environmental performance levels.

The OECD Environmental Outlook to 2050 (The Organization for Economic Cooperation and Development, 2012) report estimated that should no action be taken to address the climate challenge there will be a cost to global GDP (Gross Domestic Product) of as much as 14%. While if measures are implemented to limit global warming to a 2-degree scenario, this will only have a slight impact on future economic growth (0.2% per year). In short, the green revolution makes sound business sense. With carbon commitments now a common feature for both businesses and countries, the risks of not undertaking action on climate need to be assessed, and the right strategies formulated as a result.

What steps could governments take?

What steps could businesses take?

5

Collaboration between businesses, governments and education

What's the challenge?

The continued silo operation, sector-by-sector, organisation-by-organisation, project-by-project approach presents a major challenge to addressing net zero.

To solve problems and identify step change solutions we need a more holistic and integrated approach that brings together employers, industry bodies and academia and is supported by strong policies, legislation and funding.

While these groups often come together to address specific or localised issues, this is needed on a much wider scale to address positive change at a national or global scale.

This needs to change if we are to create the type of change that the public wants, needs and will actively participate in.

Useful links:

- Pricing for Prosperity
- All Together Cumbria

What steps could governments take?

What steps could businesses take?

6

Technology and innovation

What's the challenge?

We need to harness our increased access to data to drive digital innovation and create the solutions that mitigate the impacts of climate change. Innovation is essential in order to solve the climate challenge and the UK needs to take a leading role. Investment in cleaner, renewable power will continue to grow and there's an emerging opportunity for data, technology and innovation to push even further, and develop into a profitable growth industry for the UK. The technology available and implemented now will likely be in place in 2050 so will provide a significant contribution to us meeting net zero targets.

Yet there is often nervousness about adopting new technology before it's used by the mass market due to the real and perceived risks. However, early adopters are essential to make change happen. Waiting around for a perfect solution that fixes everything will only allow the problem to worsen in the meantime.

Useful links:

- Greening Finance: A Roadmap to Sustainable Investing – GOV.UK (www.gov.uk)
- Small modular reactors

What steps could governments take?

What steps could businesses take?

Conclusion and recommendations

We've concluded that a collaborative, coordinated approach is required to make the green industrial strategy work. A true green industrial revolution needs the co-ordinated energy, skills and funds of investors, inventors, employers, consumers, employees and regulators – it will involve everyone in the country.

Lots of the technology required for change already exists and there are already incentives to encourage change. Disruptive thinking has already had an impact on industry where the application of technology has shown innovative, leaner, greener ways of working replacing traditional models.

To achieve the dramatic and hugely urgent changes that are needed to keep the planet habitable, and make the most of the massive potential that this new world will provide, a really radical change in understanding and incentives is needed. We need to increase public understanding of the scale of the challenge in order to accelerate consumer demand for change. We need to create a world where buying the low-carbon product or picking the most sustainable service becomes the obvious choice for every consumer.

Immediate action from everyone is required to ensure we make the changes needed for a sustainable future. Gradual change is not enough. We need to collaborate as educators, businesses, governments, other organisations and individuals to create informed and confident consumers – the UK needs a skilled workforce, and the businesses to supply and employ them.

About London Transport Museum

London Transport Museum is the world's leading museum of urban transport. Situated in the heart of Covent Garden the Museum ignites people's curiosity about the world around us by exploring the powerful link between transport and the growth of modern London since 1800. In 2021, the Museum launched its Climate Crossroads programme to help visitors imagine what a greener and more sustainable future could look like for the capital, inspiring people to take action that helps us get there together. Supported by Mastercard, Mott MacDonald, Cubic Transportation Systems and Sopra Steria, the Climate Crossroads programme includes thought-leadership events, family activities at the Museum and its Depot, and skills and employability support for young people.

Find out more: www.ltmuseum.co.uk/climate-crossroads