The Heart of the UK's Green Revolution
The world around us is changing faster than we thought possible. New patterns of growth are altering the landscape of the global economy at a staggering pace. As our economy retools and moves towards a carbon-free tomorrow, we plan to lead the most ambitious carbon economy turnaround in the country.

If the UK is to build back better it’s essential that our region and the Midlands build back better, bigger and faster. Better to create a fairer, greener and more resilient economy. Bigger to improve the infrastructure and connectivity of our places. And faster so that we are the pioneers and global leaders in clean growth. Our strategy is closely aligned to the Government’s recent announcement of its Ten Point Plan for a Green Industrial Revolution1 and to the ambitions we outline below.

Our strategy is rooted in evidence. We have looked at our data and spoken to our people, including political leaders, community representatives, businesses and skills and education institutions. We have ensured their needs and aspirations are embedded in our plan.

D2N2 is home to 2.2 million residents and benefits from the largest working age population of all 38 LEPs in England. By focusing initiatives on unleashing the huge potential of our people and driving a step-change in our economy, we can unlock more equitable and inclusive growth across all parts of our region. We want everybody who lives and works here to participate fully in our exciting future.

This is a once-in-a-generation opportunity for the region. Our ambition is to add a further £9bn of green growth to our GVA by 2030 to reduce our productivity gap, while delivering our ambitious carbon turnaround. We will capitalise on opportunities presented by HS2 at Toton and Chesterfield, the redevelopment of the Ratcliffe-on-Soar Power Station into a zero carbon innovation centre, the strengthening of advanced manufacturing clusters around Infinity Park and Pride Park in Derby, the thriving digital, creative and bioscience industries in the core city of Nottingham, and our joint proposition with Leicestershire and Leicester LEP for an East Midlands Freeport.

Just as we helped bring the world the steam engine so we can develop technologies which will help to decarbonise the world. From a Gigafactory for electric vehicles to decarbonising heavy industry. From designing new green financial products to designing low carbon buildings, the opportunities of this new industrial revolution are endless.

Our collaborative approach sits at the heart of this work. There has never been a more important time for us to come together with one voice behind an ambitious vision and plan to rebuild and grow our economy. With Government’s support, we will deliver outstanding outcomes in the short, medium and long term, not just for D2N2 but for the UK economy.

I have no doubt that we will succeed. Because history shows we have done it before.

Elizabeth Fagan CBE
Chair D2N2


Foreword.
VISIONARY MINDS REBUILDING FOR GREEN GROWTH

OUR USP
We are the birthplace of the first industrial revolution and the UK’s original national park.
Today, we are the advanced manufacturing capital of the UK. We have a higher proportion of manufacturing jobs than any other LEP, the second highest manufacturing GVA (£8.1bn) and the largest cluster of transport manufacturing and R&D in the country. Many of these manufacturers are world leaders in green innovation; for example, Derby-based Porterbrook has recently begun trials of Britain’s first hydrogen powered train.

The combination of these assets and our heritage makes D2N2 uniquely placed to lead the move to a low carbon economy that powers the jobs and businesses of the future. Through a skills revolution linked to automation, innovation and digitalisation, we will continue to build on our manufacturing strength and innovation excellence to build a modern and agile economy.

Whilst our past growth has been driven by carbon-intensive industries, we have the opportunity, with our infrastructure and ingenuity, to lead the most ambitious carbon turnaround in the country. Nowhere in the UK is better placed to lead green recovery rooted in our unique combination of natural assets and the conversion of our cluster of fossil fuel sites into hubs of green innovation.

OUR APPROACH
Whilst our past growth has been driven by carbon-intensive industries, we have the opportunity, with our infrastructure and ingenuity, to lead the most ambitious carbon turnaround in the country.

We will drive a once-in-a-generation opportunity for the region taking advantage of the long-term opportunities presented by the HS2 East Midlands station at Toton and Chesterfield; working with the East Midlands Development Corporation on the redevelopment of the Ratcliffe-on-Soar Power Station in Rushcliffe; the strengthening of the advanced manufacturing and food technology clusters around Infinity Park and Pride Park in Derby; the thriving digital, the thriving creative and bioscience industries in the core City of Nottingham; and our proposition for an East Midlands Freeport.

This ambitious green revolution will act as the catalyst for a more productive and inclusive economy from which everyone living in, working in or visiting D2N2 can benefit. With investment in skills, mobility and digital infrastructure, we can ensure a, more productive and better-connected workforce, more able to participate in and benefit from this change. Our cities, towns and villages will have something for everyone.

This strategy builds on the foundations of our draft Local Industrial Strategy. We have recast it to reflect the impacts of Covid-19 to ensure we build a robust economy for the future and are the heart of the UK’s green revolution. Our strategy will be followed by the development of a D2N2 investment plan, which will develop a programme of fully costed projects across all nine of our propositions, offering compelling investment opportunities for the short, medium and longer term.
Our strategy is designed to drive improvement across three guiding principles, which are supported by a proposition and underpinned by more specific priorities and objectives:

1. **LOW CARBON GROWTH**
   - **PROPOSITION**: To lead the most ambitious carbon turnaround in the country.
   - **PRIORITY**: 1. Low carbon leadership. 2. Enabling key low carbon sites. 3. Decarbonising growth.

2. **PRODUCTIVITY**
   - **PROPOSITION**: Lead a bold new way of bringing together the education and skills, innovation and business support systems to support our people and businesses to thrive.

3. **CONNECTIVITY AND INCLUSION**
   - **PROPOSITION**: Deliver connectivity-led growth to and for all parts of the D2N2 region.

Our strategy is guided and monitored by the partners represented on our governance groups. The LEP has recently revised its governance structures to take into account our response to the Covid-19 pandemic and streamlined our advisory boards to achieve efficiencies in delivery.
The immediate impacts of Covid-19 on our economy are clear. Levels of unemployment have risen dramatically, more than doubling in some of our rural areas, with severe impacts on key employment sectors such as retail, hospitality, leisure and catering. They will rise still further when the benefits of furlough begin to wind down.

We face many geographically specific impacts, such as the impacts from international travel restrictions on the globally significant high-tech manufacturing cluster centred around Rolls Royce in Derby. In response to the Covid-19 crisis, we are ensuring that we tailor our support and funding, first to address the immediate impact of the pandemic and then to drive medium-term stability and green growth. Since the start of the crisis, we have:

- Secured over £44m of government investment in projects that will provide the stimulus for recovery, supporting over 4,800 jobs, 3,300 homes and 800 learners.
- Supported over 2,800 businesses with advice on Covid-19 through our Growth Hub and delivering further targeted assistance through the COVID-19 business resilience and restart programmes.
- Put in place a brokerage system to help match newly redundant workers with local employment opportunities.
- Worked with businesses to develop new and innovative online resources to inspire young people about future work opportunities.

The impact of Covid-19 has made it clear that we need to reconsider both which sectors are in need of immediate support to survive and which we can support to deliver future growth. By boosting productivity in our emerging and existing priority sectors, D2N2 could inject an extra £9bn into the economy and support UK Plc to get back on track for growth.

Tourism has endured an unparalleled crisis. International tourism is unlikely to recover in the near future, while domestic tourism has been affected by social distancing and measures to control the spread of the virus. We must adapt and reset the way we do business, through increased digitalisation and upskilling and by investing in our infrastructure to enable more green tourism.

We have seen a dramatic increase in remote working exploiting digital technology. While large parts of the region benefit from good fibre-based infrastructure thanks to the efforts led by councils and our private sector partners, we are falling short on the full end-to-end fibre that enables gigabit internet speeds. We also know that large numbers of people have lacked the hardware or infrastructure to take advantage of digital opportunities. We will develop digital and infrastructure strategies to ensure that we get the balance right between investment in new skills, innovation and infrastructure to deliver a more productive and better-connected workforce which can work more easily from home or travel to work using a wider range of sustainable transport options.

Some pre-existing inequalities are being made worse: for example, women are over-represented in many of the sectors most affected by lockdown measures, threatening the improvements we have seen in rebalancing gender inequalities in the workforce. Nor do we have an understanding of long-term societal impacts, such as how changing patterns of behaviour will affect mental health, and these are issues on which we will need to work with our partners in health, care and academia to shape our future interventions.

Our cities, towns and villages are diverse and brimming with potential. With investment in skills, mobility and digital infrastructure, our ambitious green revolution will act as the catalyst for a more productive and inclusive economy from which everyone living in, working in or visiting our cities, towns and villages can benefit.


“By boosting productivity in our emerging and existing priority sectors, D2N2 could inject an extra £9bn into the economy and support UK Plc to get back on track for growth.”

2 D2N2 unemployment tracker
4 University of Derby/D2N2: Employment Risks: Analysis of impact on local occupations and skills (online summary).
D2N2 covers a large and diverse area; encompassing the outstanding natural assets of Sherwood Forest and the Peak District, the UK’s original National Park, the growing vibrant cities of Nottingham and Derby and historic market towns such as Buxton, Mansfield, Chesterfield, Newark-on-Trent and Worksop, serving culturally and environmentally rich rural hinterlands. Despite our size, D2N2 benefits from a highly functional economic geography that is advantageously located at the heart of the country.

The D2N2 economy is the 4th largest outside London and the South East. It contributes £48.4bn in GVA to the UK economy; 8.3% growth since 2012. We will add a further £9bn to our GVA by 2030 to reduce the productivity gap. As the largest economy in the East Midlands, the only region outside London to see the value of its exports rise in the first quarter of 2020, D2N2 will make the most of the historic opportunities for trade and investment arising from leaving the EU, and the opportunities for reshoring highlighted by the supply chain impacts of Covid-19.

**Outstanding Strengths**

Manufacturing generates £7.2bn in GVA, ranking 3rd outside London and the South East. 92% of D2N2 workers live in the D2N2 area and 87% of D2N2 residents work in D2N2 travel to work areas. 9 million people live within 20 miles of D2N2 and 87% of the country’s population are within 4 hours drive. We attract around 3 million visitors and £475m in visitor spending per year, 70% above the Midlands average.

We are world leaders in transport equipment manufacturing based on strong innovation and manufacturing expertise clustered around Derby. We are home to globally significant aerospace, automotive and rail manufacturers such as Toyota, Rolls Royce, Bombardier, and their significant local supply chains.

The planned East Midlands HS2 station at Toton, between Nottingham and Derby and the Staveley depot near Chesterfield.

Third largest life sciences cluster in the UK anchored by Boots, MediCity and BioCity in Nottingham. Digital tech cluster focused around Nottingham’s ‘Creative Quarter’ (36% growth between 2012 and 2018). Our strong science and innovation ecosystem is underpinned by D2N2’s three universities, (Nottingham, Nottingham Trent and Derby), six science parks and fifteen innovation centres/incubators. Research strengths supporting our green recovery include Bio and Environmental Sciences, Renewable Energy and Sustainability.
Outside our two major cities, D2N2’s districts and boroughs generate almost two-thirds of our GVA and over a third of its employment takes place in predominantly rural local authority areas. D2N2’s dispersed network of towns and adjacent rural economies house key manufacturing sites, major employers and thriving small businesses.

Some of the nation’s largest food manufacturers are based in the D2N2 area and use some of the raw materials produced by a progressive and diverse agricultural and horticultural sector. Nottingham University’s Sutton Bonington campus hosts world-leading facilities for biosciences and veterinary medicine.

In rural High Peak, well connected to Buxton, the Health and Safety Executive run a laboratory researching new methods in industrial safety, while the emerging digital and creative cluster around Glossop exemplifies the diversity of rural districts. Factories leading the experiment in modern methods of construction and modular housing can be found in Ilkeston, Worksop and South Derbyshire. In Rushcliffe, the historic Stanford Hall Estate has been transformed into an award-winning military centre of excellence for rehabilitation, with ambitious plans to create a national rehabilitation centre for civilians. These networks of towns, villages and wider rural areas are home to much of D2N2’s workforce too.

Leisure, sporting and cultural tourism are hugely important economic contributors to D2N2, we will develop an integrated vision of how the region’s tourism sector can build back better and greener, drawing on our increased digital capability. The region is the perfect test bed for a ‘Tourism Action Zone’ proposed in the 2019 Tourism Sector Deal, and we will make it a green tourism zone.

However, there are significant differences in the socio-economic conditions experienced across D2N2’s communities, including a polarised productivity problem and a legacy of carbon-intensive industries. The disproportionate impact of Covid-19 lockdown measures on some places and groups such as women and younger workers may exacerbate these existing issues. Our cities have strong concentrations in sectors that have been particularly affected by Covid-19 and are working hard to identify opportunities to diversify. They will have a key role in driving new economic opportunities to ensure D2N2 is better able to compete with other sub-regional economies such as Manchester City Region, Sheffield City Region and the West Midlands Combined Authority area.

Our cities have strong concentrations in sectors that have been particularly affected by Covid-19 and are working hard to identify opportunities to diversify.”

CHALLENGES TO ADDRESS

The impact of climate change on our natural assets and society.

28% higher carbon emissions per capita than the UK average due to concentration of energy-intensive industries.

Our labour productivity gap is widening, with GVA per hour worked 14% below the UK average.

High proportions of low skilled and low earning jobs, and long-term unemployment.

54,000 jobs are at high risk of automation and 413,000 more likely to experience various forms of automation.

Levelling up the socio-economic inequalities linked to low educational attainment and workforce skill levels.

13 out of 17 local authority areas within the D2N2 region are identified as ‘social mobility coldspots’.

Poor rail connectivity, with many slow lines lacking electrification, and many rural areas bypassed altogether.

The disproportionately adverse impact of Covid-19 on some places, sectors and demographic groups, including the digital exclusion experienced by some of our residents that Covid-19 has highlighted.
A partnership that delivers change.

We will build on our past successes and pursue a step-change in the inclusivity, productivity and sustainability outcomes of our regions growth. The ambitious projects we are already delivering demonstrate our determination to invest where the evidence tells us we can have the greatest impact on the regions economy.

Below are examples of some of the projects we have funded. A comprehensive list can be found on our website.

DELIVERING OUR SKILLS NEEDS

D2N2 LEP has invested over £40m of Local Growth Funds (LGF) to ensure that skills needs are met in the area and new learning opportunities are available to a new and existing workforce.

1. MANSFIELD AUTOMATION AND ROBOTSICS TRAINING CENTRE

D2N2 LEP has invested £693k towards the development of a new Automation and Robotics Training Centre at Vision West Nottinghamshire College’s Sutton-in-Ashfield campus. The new facility will deliver a proactive response to development of skills which will support employers to raise the number of higher skilled roles within their future workforce in the areas of Engineering, Manufacturing and Distribution. The project will support skills delivery to over 1,100 learners and safeguard jobs for years to come in Nottinghamshire.

2. CHESTERFIELD CENTRE FOR HIGHER LEVEL SKILLS

In 2015, D2N2 LEP invested £3.4m of LGF to the redevelopment of the historic St Helena’s campus facility in Chesterfield, Derbyshire. The project worked in partnership with the University of Derby to develop new higher-level learning opportunities in an area where there was previously a dearth of this opportunity. The new centre opening has focused heavily on the teaching of Nursing and Health courses, delivering qualifications to over 900 learners to date.

PROMOTING INNOVATION IN KEY SECTORS

3. UNIVERSITY OF DERBY RAIL RESEARCH AND INNOVATION CENTRE

In June 2019, a £1.4m Rail Research and Innovation Centre was opened at the University of Derby, enabled by a grant from D2N2’s Local Growth Fund. Building on Derby’s strength in the rail industry, the facility will support around 80 supply chain businesses, 15 new collaborative research projects and guide 20 companies through innovation funding applications by 2022, as well as enhancing the skills of 80 or more rail sector employees.

4. BIOCITY

BioCity in Nottingham was founded in September 2003 and houses over 60 companies and 500 people. The success of the initiative, which boasts a 91% start-up survival rate, has been helped by the support of Nottingham’s universities, on-site patenting experts and partners from legal and financial service firms. In 2017, a striking £30m ‘Discovery Centre’ extension opened, enabled by a £6.5m investment from D2N2 via the Local Growth Fund.

5. MEDICAL TECHNOLOGIES INNOVATION FACILITY (MTIF)

Nottingham Trent University’s MTIF has received £9.7m from D2N2. It will improve patient care by speeding up medical product development and getting innovations to market as quickly as possible which is critical for business survival, growth and profitability.

6. ADVANCED MANUFACTURING CENTRE

D2N2 LEP has invested £5m towards the Advanced Manufacturing Building on the University of Nottingham’s Jubilee Campus. This investment has created new facilities for research and teaching in Advanced Manufacturing. The facility aims to create a skilled workforce for D2N2 through the provision of new highly skilled graduates and innovation through high quality Research and Development with local businesses.

PROMOTING OUR HISTORIC AND NATURAL ASSETS

7. BUXTON CRESCENT

D2N2 LEP has invested £2m into the redevelopment of one of D2N2’s most historic and magnificent buildings, Buxton Crescent in Derbyshire. The Grade 1 listed Buxton Crescent has undergone a £70m redevelopment and restoration to create an 80-bedroom, luxury hotel and spa business, as well as six retail units on the ground floor which opened its doors in October 2020. The restoration has created 350 jobs through the construction phase, with 140 jobs expected permanently. With a £4.5m boost to the local economy, the Robin Hood legend and the renovation of the Castle building to create a new Robin and the Rebels themed visitor attraction and is due to reopen in early 2021.

8. SHERWOOD VISITOR CENTRE

In partnership with various bodies including the RSPB and Nottinghamshire County Council, the D2N2 LEP has part funded £500k towards the development of the new Sherwood Visitor Centre. The centre opened to the public in 2018 and looks to attract over 350,000 visitors per annum to the area, building on the natural asset of the Sherwood Forest and attracting visitor numbers to further enhance the visitor economy in D2N2.

9. DERBY SILK MILL

D2N2 LEP is investing £3.7m of Local Growth Funding into the redevelopment of the Derby Silk Mill, turning it into the Museum of Making. Work began in February 2018 with the museum due to welcome its first visitors in 2021. The Silk Mill, in Derby city centre, is widely regarded as the site of the world’s first factory and is part of the Derwent Valley Mills World Heritage Site. The Museum of Making will create a ‘southern gateway’ to the Derwent Valley, which its hoped will bring more than 140,000 visitors to the area per year, adding over £4 million to the city’s economy, and creating nearly 150 jobs in the wider Derby area.

10. NOTTINGHAM CASTLE

D2N2 LEP has invested £2m towards the £30m redevelopment of the historic site at the heart of the Robin Hood legend and the starting point for the English Civil War, Nottingham Castle. The programme of works includes the construction of the new Visitor Centre and the redevelopment Ducal Palace, the Grounds, and the sprawling cave systems hidden within the Castle Rock. The project will also fund the renovation of the Castle building to create a new Robin and the Rebels themed visitor attraction and is due to reopen in early 2021.

The Heart of the UK’s Green Revolution
GUIDING PRINCIPLE #1:

Low carbon growth

We will lead the most ambitious carbon turnaround in the country.

The legacy of the industrial revolution has served us well, but the challenge of climate change means we must now realign our social, environmental and economic goals. Our region has business, academic and natural assets that mean we can punch well above our weight in delivering the Ten Point Plan for a Green Industrial Revolution.

Our world class transport manufacturing businesses such as Rolls Royce, Toyota and Bombardier are leading projects to reduce the carbon footprint of their businesses and supply chains and to future proof their operations through adopting green technologies. Our private sector expertise in low carbon energy stretches much further, including businesses such as Worcester-Bosch, who are producing low-carbon alternatives to traditional gas boilers and Porterbrook, who have just test-run the UK’s first hydrogen powered train.

Replacing our coal-fired electricity generation provides an unprecedented opportunity to spearhead a new, ambitious zero-carbon energy zone at Ratcliffe-on-Soar that can be a showcase to the rest of the country. It will encompass: large scale clean hydrogen generation and distribution; energy from waste; a gigafactory for low carbon vehicles; training facilities supporting a range of low carbon sectors; and hosting the flagship national research centre for Integrated Zero-Carbon Futures. In combination this campus for low carbon energy generation, innovation and employment forms a key part of our ambitious Freeport proposition. Ratcliffe’s proximity to Derby, whose globally-significant manufacturing businesses have committed to make the city the UK’s leading adopter of hydrogen technology, makes Derby the obvious place in the UK to become the Government’s proposed “hydrogen town”. We also have the potential to trial a “hydrogen village” in the proposed new garden village in Basdeford.

We have the opportunity to develop other sites. These include former power station sites at Cottam and High Marnham in northern Nottinghamshire which will be the core of the second phase of our plan to roll out large scale, low carbon electricity generation and innovation to all parts of the region, levelling up the distribution of highly skilled and well paid jobs.

And next door to Derby is the Peak District, where the National Park Authority and Derbyshire County Council are leading ambitious plans to develop low carbon transport solutions that are economically sustainable and will underpin the ability of residents to live, work and learn locally while enhancing the already outstanding tourism offer of the Peak District with firmly green credentials. We can provide the electric vehicles and the local leadership, and with government investment in electrical vehicle charging and low carbon power generation, we can make the Peak District an environmentally and economically sustainable rural powerhouse. We have already firmly established our position as a major investor in public transport, walking and cycling, and continue to ensure that all our capital investments promote the highest standards of low and zero emission travel.

We are also exceptionally well placed to take a leading role on the nuclear agenda. Rolls Royce’s expertise in nuclear power is long-established, and their commitment to develop Small Modular Nuclear Reactors will be crucial to the Ten Point Plan. And our nuclear offer goes much wider. With academic excellence within the University of Nottingham Manufacturing Research Centre in Derby and our close ties to the cluster of nuclear expertise around Rotherham, we will develop a compelling pitch to the UK’s centre for nuclear fusion innovation.

A key element of our work is to work with industries to become greener. This is in part about fostering an even stronger culture of collaboration between and within sectors, and it is also about working intensively with hard-to-decarbonise sectors. With our leading UK role in minerals extraction for the construction sector and the unique cluster of offsite housing manufacturers in D2N2, we are developing pioneering proposals to decarbonise the housing sector, making D2N2 the place to invest in large scale low carbon housing. We will invest not just in large-scale capital programmes that shift the dial on our emissions, but in the careers inspiration and skills support to grow a highly skilled, highly paid workforce to ensure we can develop a construction sector that continues to innovate and deliver more, better and affordable homes for the long-term.

We are fortunate to have low carbon leadership across the region and across political divides. Derby City Council has recently declared its ambition to become the UK’s centre of excellence for future fuel technologies. Nottingham City and its neighbour Rotherham are amongst the most ambitious in the country, planning to make their areas carbon-neutral by 2028 and 2027 respectively. All of our local authorities have or are about to launch large scale social housing retrofit programmes to drive energy efficiency, tackle fuel poverty and support public health. Our challenge is that we would like to go further, faster and we welcome the Government’s commitment to do the same. Investing in a D2N2-wide retrofit programme will give the scale and pace of delivery that other regions will struggle to deliver.

In terms of nature and carbon capture, we are keen to work in partnership with DEFRA to invest in key technologies and land management practices that could enhance the ability of our natural assets to contribute to carbon sequestration. The Peak District is uniquely well placed, with the potential to regrow peat bogs that are amongst the most effective tools we have to sequester carbon, and areas such as Sherwood Forest and the Trent Valley can, with large-scale capital programmes that shift the dial on our emissions, but in the careers inspiration and skills support to grow a highly skilled, highly paid workforce to ensure we can develop a construction sector that continues to innovate and deliver more, better and affordable homes for the long-term.

We are fortunate to have low carbon leadership across the region and across political divides. Derby City Council has recently declared its ambition to become the UK’s centre of excellence for future fuel technologies. Nottingham City and its neighbour Rotherham are amongst the most ambitious in the country, planning to make their areas carbon-neutral by 2028 and 2027 respectively. All of our local authorities have or are about to launch large scale social housing retrofit programmes to drive energy efficiency, tackle fuel poverty and support public health. Our challenge is that we would like to go further, faster and we welcome the Government’s commitment to do the same. Investing in a D2N2-wide retrofit programme will give the scale and pace of delivery that other regions will struggle to deliver.

The lessons we are learning from the Covid-19 outbreak demonstrate that many aspects of working, learning and socialising can be undertaken in a lower carbon way. We will work to ensure the lessons learnt are embedded into our strategy, commissioning and funding.
GUIDING PRINCIPLE #1: LOW CARBON GROWTH

Our proposition: To lead the most ambitious carbon turnaround in the country.

<table>
<thead>
<tr>
<th>WHAT WILL WE DO?</th>
<th>HOW?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Deliver an ambitious programme to convert our existing energy assets to low carbon to support the ambitions of our area to get to net carbon zero before the 2050 deadline.</td>
<td>• Deliver a globally significant energy production, innovation, education and storage cluster based around Ratcliffe-on-Soar power station, complementing plans for a Freeport, our vision for a low carbon Gigafactory and the greener HS2 station in the country at Toton. • Develop a network of hubs making the best use of similar power stations including Cottam and High Marnham power stations to ensure all parts of the region benefit from locally generated low carbon energy. • Lead the development of a green themed East Midlands Freeport at Ratcliffe-on-Soar. Working with our partners including Leicester and Leicestershire Local Enterprise Partnership LLEP, the Midlands Engine Development Corporation and East Midlands Airport.</td>
</tr>
<tr>
<td>2. Immediately stimulate our economy, increase skill levels and tackle fuel poverty by investing in regional energy efficiency programmes.</td>
<td>• Stimulate demand for the adoption of clean hydrogen to incentivise investment in its production across the region through a new energy partnership.</td>
</tr>
<tr>
<td>3. Maximise the power of our natural assets to contribute to carbon sequestration and mitigating the economic impacts of climate change.</td>
<td>• Test, demonstrate and apply transformative technologies such as carbon capture. • Support the Peak District’s National Park in becoming Zero-Carbon by 2030. • Establish more charging points in the Peak District and other rural areas to incentivise electrified transport.</td>
</tr>
<tr>
<td>4. Focus on innovation and knowledge transfer to ensure the expertise in low carbon in all of our industrial sectors including manufacturing, housing, logistics and agriculture is adopted quickly and widely across all sectors and places.</td>
<td>• Deliver a ground-breaking programme with Homes England and the private sector to decarbonise our housing supply chain. • Invest in an ambitious D2N2-wide social housing retrofit programme, decarbonising existing housing stock with testbeds in Mansfield and Nottingham building on the existing best practice already underway by Nottingham City Council. • Target our housing and construction skills investments on sites and programmes that promote and deliver modern methods of construction. • Develop learning policy for new housing developments which surpass national standards.</td>
</tr>
</tbody>
</table>

HOW WILL THE REGION BENEFIT?

• Our economy will be driven by clean growth - D2N2 and its natural assets are known globally as clusters for zero-carbon and carbon-negative industries.
• More highly skilled, well-paid jobs across the region.
• More low carbon energy produced and consumed in the region.
• Our transport systems will have shifted to low and zero carbon options.
• More low carbon homes being built or upgraded, promoting green growth and tackling fuel poverty.
• Lower carbon emissions supporting improvements in health and biodiversity.
• By moving at pace, we will ensure the region gets to net zero in advance of the UK target.
• Establishing our reputation as the most ambitious region on low carbon will enhance our ability to attract investment and retain our young people and graduates.
• Deliver reskilling and upskilling of our workforce to take advantage of our clean growth ambition.
GUIDING PRINCIPLE #2: Productivity

We will lead a bold new way of bringing together the education and skills, innovation and business support systems to support our people and businesses to thrive.

Skills are a key route to productivity, but for too long large parts of the region have experienced low educational attainment, and there are significant disparities in attainment within the area. These filter through to a skills profile amongst our workforce, where, although the picture is improving, we have a significantly lower percentage of people with high level qualifications than the national average.\(^{15}\)

Our Skills Advisory Panel is leading the skills and employment response to Covid-19 that closely aligns to our economic strengths and sectors. We will mitigate the impact on businesses and support existing and new businesses to source the talent they need to flourish. We will enable D2N2 residents to enter and progress along flexible skills pathways at all levels and career points: skilling, upskilling and reskilling.

In the longer term, we will ensure our population is better skilled for and throughout life. For example, the Centre for Cities indicates that more than 30% of roles in Mansfield and Ashfield are threatened by automation. We must be well-prepared to attract longer-term business investment and maximise our opportunities from globalisation and the new free trade environment post-EU exit. We need to better understand the challenges posed by the climate emergency and support our businesses and wider society in their response. We will support and enhance our manufacturing base, attract inward investment and exploit new trade and reshoring opportunities.

Improving the capacity and capability of our businesses will be an essential part in addressing our productivity and competitiveness. This means supporting both the low carbon growth of our productive and high-value firms, who have the potential to improve our GVA, and ‘levelling-up’ those that lag to do more. Our world-class advanced manufacturing sector has a role to play in sharing their expertise with other sectors, and our refocused Business Growth and Innovation Advisory Board will work with our partners to rebuild the region’s innovation and knowledge transfer infrastructure. We will develop the business case for a range of new interventions to support businesses to adapt to seize the long-term advantages of digitalisation and automation and to be resilient to the impact of Covid-19 and climate change, for example working with our Enterprise Zones to identify how we can recycle their business rate income to develop them as innovative “Green Enterprise Zones”.

Our low carbon academic assets include the University of Nottingham's Energy Technologies Research Institute, the University of Derby which runs D2N2's DE-Carbonise project to help small and medium-sized enterprise to reduce their carbon emissions and Nottingham Trent University, a key partner in the ground-breaking REACT-First carbon recycling project. As a LEP we have already supported low carbon projects as varied as investing over £11m in the DREeM social housing retrofit programme, allocating £6.7m for improved cycling access across the region and awarding £0.5m for the creation of sustainable business units at Sherwood Energy Village. This strategy makes it clear that our recovery will be green. It will herald an even faster shift to renewables use and production, and the investments in skills, innovation and infrastructure that will be needed to sustain the change.

D2N2 is a forward thinking region. We were the first LEP or Combined Authority to join the Emergent Alliance, a partnership led by Rolls Royce of digitally-savvy businesses using data and analytics to identify responses and solutions to Covid-19, and we are working with partners in business and academia to pool the region’s data and analysis capacity to take new approaches to forecasting and analytics to find the solutions to climate change. We will embed and sustain this capacity in partnership with our universities. Just as we led the first industrial revolution, so we will be at the forefront of the fourth.

---

GUIDING PRINCIPLE #2: PRODUCTIVITY

Our proposition: Lead a bold new way of bringing together the education and skills, innovation and business support systems to support our people and businesses to thrive.

WHAT WILL WE DO? HOW?

1. Ensure that our workforce can access the skills and education they need to seize the opportunities from the growth sectors in automotive manufacturing, medtech/bioscience and low carbon, and in digital roles across all sectors and in all places.
   • Coordinate and strengthen relationships to ensure our education providers are working with businesses to deliver the courses we need for the current and future economies.
   • Secure an Institute of Technology as the first step on an ambitious skills programme to provide the right skills at the right levels for all D2N2 residents.
   • Invest and develop a region wide digital skills academy supporting upskilling across all sectors.
   • Roll out three new Careers Hubs to enable the best prepared young workforce in the UK for roles in digital, automation and low carbon.

2. Support our partners in national and local government and the education sector to mitigate the worst impacts of Covid-19 by ensuring all of our residents who are affected have access to support to retrain and upskill.
   • Enhancing the skills support programmes already led by DWP and our LAs by providing coordination and leveraging in funding.
   • Co-design and commission programmes to fill any gaps that we identify in provision.

3. Make D2N2 the most attractive region for businesses to start up, invest and grow by ensuring we have the highest quality support for businesses underpinned by an innovation network focused on commercialising our academic excellence to business adoption of technologies for growth.
   • Further strengthen our Growth Hub by merging and/or jointly promoting business, innovation and skills schemes to simplify and join up business support programmes to give a simpler customer journey.
   • Build on and extend DIT’s Key Account Model with foreign owned businesses to develop account management style of business support across the high-value end of the supply chain.
   • Work with Government to develop effective incentives and advice for SMEs and big business on how to seize the opportunities of automation, digitalisation and low carbon.
   • Encourage businesses to invest in innovation, skills, digitalisation and trade.
   • Commissioning our innovators to focus on gaps in the market, to maximise diffusion of new ideas and products.
   • Ensure that our business support services work equally well in support of our towns and rural areas as for our cities, and for social enterprises as well as the private sector.

HOW WILL THE REGION BENEFIT?

• A more highly skilled workforce able to access jobs that are already vacant and new jobs that will be created.
• A more digitally enabled workforce better able to move between and within sectors.
• Our training providers have aligned their offers to the needs of the D2N2 labour markets and business needs.
• Businesses see a step change in the work readiness of their workforce and a positive impact from our younger workers on productivity, growth and wages.
• The scale of the increase in long-term unemployment, and its impact on physical and mental health, is reduced.
• Increased capacity in our service providers enables our workforce to be supported more quickly.
• More businesses will survive, grow and create sustainable jobs and apprenticeships.
• Levels of trade and inward investment are increased, leading to increased GVA.
• Higher productivity through increased commercialisation of our R&D, increasing our ability to attract further investment in our innovation and science base.
GUIDING PRINCIPLE #3:

Connectivity and inclusion

Deliver connectivity-led growth to all parts of D2N2.

We are one of the most accessible areas in England. However, our connectivity does not always reflect this, and unless growth locations in D2N2 are connected, physically and digitally, inclusive growth won’t happen at all.

In our Strategic Economic Plan Vision 2030 we committed to improving our understanding of inclusion to include it in all planning, implementation and monitoring activity. While we have now adopted an inclusion framework that requires all of our programmes to demonstrate their contribution to promoting inclusion and improving social mobility, we still have considerable challenges to overcome. These include too many places and people experiencing long-term unemployment, poor education, poor health outcomes and low aspirations, and we know that many of these places are also vulnerable to the impact of Covid-19 and the lockdown measures associated with it. We must support the levelling up of these areas and are keen to work with government to help develop a funding formula for the UK Shared Prosperity Fund and other funding that gives due weight to issues of levelling up. With the right interventions we can help reduce sickness and absence, welfare dependency and health deterioration.

In addition to the actions noted above around targeting our skills, careers and employment programmes to have maximum impact on social mobility, Covid-19 has thrown into sharp relief the issue of digital exclusion. We know many people have been unintentionally excluded because they work in roles that cannot be carried out remotely, because they have limited digital connectivity, because they lack to skills to participate digitally, or because they have limited access to the hardware needed to access the internet. We must ensure people can access a greater range of opportunities wherever they choose to live. Conversely, Covid-19 has taught us the power of digital connectivity, with many businesses being able to survive by working remotely, students continuing to learn online and our own Enterprise Adviser Network leading the way nationally with new and inspirational online careers content. We need to ensure that our investments help to ensure our entire region is digitally connected and skilled.

Our cities of Nottingham and Derby need to be better connected with each other, and they need to connect to the suburbs, towns and villages that make up their hinterlands too, to bolster their own success but also that of their neighbours. For too long, the East Midlands has received the country’s lowest levels of transport infrastructure investment (per capita), and we will increase our efforts, in partnership with our colleagues in Midlands Connect, to close this gap. HS2 is a once-in-a-generation opportunity to become a super connected region if we use it to enhance local as well as national connectivity. The investment of up to £25m in each of Long Eaton and Staveley in Derbyshire and Stapleford in Nottinghamshire through our Towns Fund puts the onus on partners across D2N2 to maximise the cross-over benefits of these investments.

Across D2N2 our local authorities are working tirelessly to combat the threat of Covid-19, but they are also looking to the future. They are leading the work to reimagine what our village, town and city centres will become. We will support this unique opportunity to consider what the social and economic roles of our places could be and to invest in innovative reimagining, such as developing a clearer and consistent offer on green and cultural tourism to the region. We will harness the incredible analytical powers of our universities and big businesses to use big data in a way that has never been possible during any previous economic crisis to support out thinking: a digital revolution from the place that gave the world the industrial revolution.

And from the home of the original national park, we will also lead a green revival, harnessing the power of our diverse landscapes to promote better health, clean growth and biodiversity. The Peak District is not just our prize tourism asset, it can also play a crucial role in carbon sequestration. The unique 5G trial in Sherwood Forest is supporting tourism and the wider economy while enhancing care for the environment. Along the Trent Valley, ambitious plans are underway to promote opportunities for climate change adaptation, enhancing natural capital and nature recovery to deliver health and wellbeing benefits using the beauty of the river for local people and visitors.

Because considerations of place transcend geographic boundaries, it is vital that we continue to work in collaboration with our Midlands Engine partners (Leicestershire, Lincolnshire and Staffordshire), major neighbouring city regions such as Sheffield City Region, Leeds City Region and Greater Manchester, and even parts of the Humber and Cheshire & Warrington LEP areas. Our labour and leisure markets are often highly integrated and co-dependent. We remain committed to working with our neighbours and beyond in achieving our aims with better connectivity and strong cross-boundary collaboration to ensure our outcomes of are maximised for the region and beyond.

“Across D2N2 our local authorities are working tirelessly to combat the threat of Covid-19, but they are also looking to the future.”
GUIDING PRINCIPLE #3: CONNECTIVITY AND INCLUSION

Our proposition: Deliver connectivity-led growth to and for all parts of the D2N2 region.

<table>
<thead>
<tr>
<th>WHAT WILL WE DO?</th>
<th>HOW?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Support the biggest turnaround in social mobility in the country.</td>
<td>• Ensure all our investments are tested against D2N2’s inclusion framework to ensure we are maximising their impact on promoting social mobility.</td>
</tr>
<tr>
<td></td>
<td>• Develop a comprehensive digital strategy for D2N2 to close skills, boost innovation and ensure region-wide wireless and/or broadband connectivity.</td>
</tr>
<tr>
<td></td>
<td>• Build on the Universities for Nottingham initiative to develop a civic agenda between Cities, towns, schools, colleges and universities to develop our residents’ skills and promote social mobility and the University of Derby’s leading role in delivering the Derby Opportunity Area.</td>
</tr>
<tr>
<td>2. Make D2N2 the best-connected region, enabling people and businesses in rural and urban settings to reduce unnecessary travel and haulage and, when we do travel, to have access to quicker and more reliable low carbon options.</td>
<td>• Ensure our infrastructure investments support programmes and projects which can demonstrate a significant impact on reducing carbon emissions.</td>
</tr>
<tr>
<td></td>
<td>• Secure more private sector support for and investment in our low carbon capital programme.</td>
</tr>
<tr>
<td></td>
<td>• Target capital investment on sectors where D2N2 has a competitive advantage including offsite-construction and low carbon energy.</td>
</tr>
<tr>
<td></td>
<td>• Enable faster and better digital connectivity for businesses and residents across the region, superfast broadband for areas including the Derbyshire Dales, Newark and Sherwood and Bassetlaw where there is currently poor connectivity, to promote engagement in work and learning and to reduce the need for travel.</td>
</tr>
<tr>
<td>3. Use our economic and skills investments in our cities, towns, rural areas and growth corridors to promote improvements in quality of life for residents, workers and visitors.</td>
<td>• Support the transformation of our city and town centres to meet challenges including the shock from Covid-19, climate change, EU exit and automation.</td>
</tr>
<tr>
<td></td>
<td>• Ensure we seize the opportunities for green growth, including in our outstanding tourism sector, in housing and in improving the green credentials of existing investments such as our enterprise zones.</td>
</tr>
<tr>
<td></td>
<td>• Develop opportunities linked to the HS2 stations at Toton and Chesterfield, and at stations in neighbouring cities such as Sheffield, and ensure that the wider regional connectivity to maximise the impact across the region is realised in full.</td>
</tr>
</tbody>
</table>

HOW WILL THE REGION BENEFIT?

• Higher levels of employment in groups currently experiencing exclusion from the labour market.
• Fewer of our local authorities will be identified as social mobility cold spots.
• Our significant gaps in digital skills and vacancies in digital roles are reduced.
• Maintained and enhanced viability of our rural communities.
• Higher level digital skills enabling workers to access a higher range of jobs.
• Low carbon emissions from transport.
• Greater connectivity enabling more jobs to be undertaken from more places and reducing the adverse health and economic outcomes linked to congestion.
• Maintained and enhanced viability of our urban and suburban communities.
• More businesses investing in green technologies and skills to boost their productivity and lower their emissions.
• More visits to and commuting within the region is undertaken by low carbon methods, supporting environmental and health improvements.
Ask of Government

To achieve the step-change in support we are aiming for, we want to strike a deal with government for support in the form of funding and increased flexibilities for a range of programmes and projects including the indicative list below. Our ask is set out as a series of priorities for funding. Our Advisory Boards would have a key role in commissioning and shaping the individual projects in support of these programmes to ensure they achieve the strategic objectives in this plan.

In particular we need urgent clarity and access to the UKSPF which the Government has indicated will offer at least the same level of funding for the region as under European Structural Funds.

Moreover, in the light of the government’s commitment to level up our region and because of the disproportionate impact of Covid-19 on many of our places, sectors and demographic groups, we seek an urgent discussion with HMT Treasury over an updated approach to programme funding to deliver the objectives in this plan. This must address longstanding underfunding and emerging post-Covid needs.

In return, the D2N2 area will be able to build back not just better but faster and greener. In turn that will enable a greener recovery, as we can bring forward projects that will increase the pace and volume of our reduction in carbon emissions.

Our ask is set out as a series of priorities for funding. Our Advisory Boards would have a key role in recommending and scoping the individual projects in support of these programmes.

Programme 1: D2N2 Low Carbon Energy and Growth Fund

Our ask
- Government to fully fund the East Midlands Development Corporation’s request for £230m to capitalise the developments at East Midlands Airport, HS2 East Midlands and Ratcliffe-on-Soar (including ZERO and potential conversion of the site to low carbon energy production and the development of skills and training facilities on the site).
- A mixed capital/revenue programme to enable us to develop investable propositions in low carbon energy production and adoption, modern methods of construction, retrofits and other low carbon adaptations.
- Government allows us to give due weight to the contribution of our investments to tackling climate change in making funding decisions and gives more flexibility to our local planning authorities to require the highest environmental standards from developer.

We will
- Increase productivity in the construction sector.
- Increase the amount and proportion of MMC housing in D2N2.
- Reduce emissions from construction and extraction.
- Increase the percentage of renewables being generated in and used by D2N2.
- Increase the number and skill levels of jobs in low carbon roles across sectors.

Programme 2: Inclusive Education and Employment Support

Our ask
- Award D2N2 an Institute of Technology.
- Revenue funding for an employment programme for those disproportionately excluded from the labour market and an parallel programme to promote and embed inclusive recruitment practices and to upskill and reskill workers impacted by Covid-19.
- Revenue and capital funding for a digital reskilling programme to reduce digital exclusion in disadvantaged areas and amongst disadvantaged groups and address key skills gaps across many sectors.
- A career’s guidance guarantee backed by the funding to roll out of Careers Hubs to all parts of D2N2.
- Flexibility for all unspent Apprenticeship Levy across D2N2 to be pooled by our upper-tier LAs to enable comprehensive, locally tailored skills, apprenticeship and T-Level support services.

We will deliver
- Increased apprenticeship take up in key sectors.
- Reduced NEET levels.
- Increase in the Gatsby benchmarks for careers inspiration across the region.
- Reduced unemployment amongst vulnerable groups.
- Increased social mobility in our social mobility coldspots.
- Fewer skills shortages reported by employers, particularly in digital skills.
We will
• Reduce emissions from transport.
• Improve journey times across our region.
• Reduce the number of our districts being social mobility coldspots.
• Reduce rural exclusion and increase in rural wages.
• Reduce NEET and unemployment.
• Return Visitor spend to pre-Covid levels.

CONCLUSION AND FINAL STATEMENTS

D2N2 is excited to leave behind its carbon intensive past and spearhead a clean, inclusive recovery, spearheading the Government’s commitments to a green recovery and to levelling up areas of historic under-investment.

Our strategy seeks to:
• Recover from the impacts of Covid-19 and redress our productivity lag, to become one of the most productive areas by:
  • Supporting the retraining and reskilling of our people to reduce the impact of unemployment on our workforce.
  • Addressing the high proportion of low-skilled and low-earning jobs in D2N2, by upskilling more of our population more quickly.
  • Ensuring that our businesses have the access to co-ordinated support and funding that meets their needs for growth and drives long term investment.
  • Providing the skills and space required for businesses to scale and develop.
  • Continuing to invest in and champion the benefits of innovation, research and development in supporting recovery and growth.

Supporting our businesses and people prepare and prosper post-EU exit by opening up new markets for our most competitive businesses and showcasing our world leading sectors to attract investment.

Reduce our reliance on carbon-intensive industries, and drive economic growth through growth in clean and green industries, by:
• Utilising the closure of our carbon-emitting power stations as an opportunity to spearhead new zero-carbon energy systems and related business clusters.
• Decarbonising our housing chains, transport systems and our key carbon intensive sectors.
• Nurturing the growth of low and zero-carbon focused businesses.
• Using the impact of Covid-19 on other sectors to lead a reskilling programme to enable the growth of our low-carbon sectors.

Reduce the concentration of social-mobility coldspots across D2N2, and become a better connected, more inclusive place to live, by:
• Transforming intra- and inter-regional connectivity, to ensure greater access to opportunities wherever you live in D2N2.
• Learning from Covid-19 about the changing ways we are using digital technology to work, learn and socialise and to enable the potential growth benefits of these changes.
• Supporting our businesses in reaching the potential of traditionally excluded populations.
• Capitalising on the opportunities bought about by HS2 at Toton and Chesterfield and the wider area.

We will also review the impact of Covid-19 on our economy and our response to it in order to ensure we are better prepared to respond to any future crises.

D2N2 is ready to be the low-carbon, high-powered spark in the engine that drives UK recovery and growth.