



We connect for good in Scotland

Ideas for the next Scottish Government



BT Group welcomes the opportunity to outline key priority areas for the next Scottish Government to consider. We work to keep people connected and have always seen the value and necessity in developing access for people living and working in Scotland.

The Covid-19 pandemic has changed the landscape of every sector in Scotland and beyond, demanding a sudden reliance on skills and devices to access basic services and keep connected with family, work and education. This accelerated reliance on connectivity brings several opportunities and issues to the fore.

The pandemic has highlighted a digital divide, not just in terms of access to digital devices and coverage but also the ability to harness digital skills both for businesses and communities, spanning cities to rural communities.

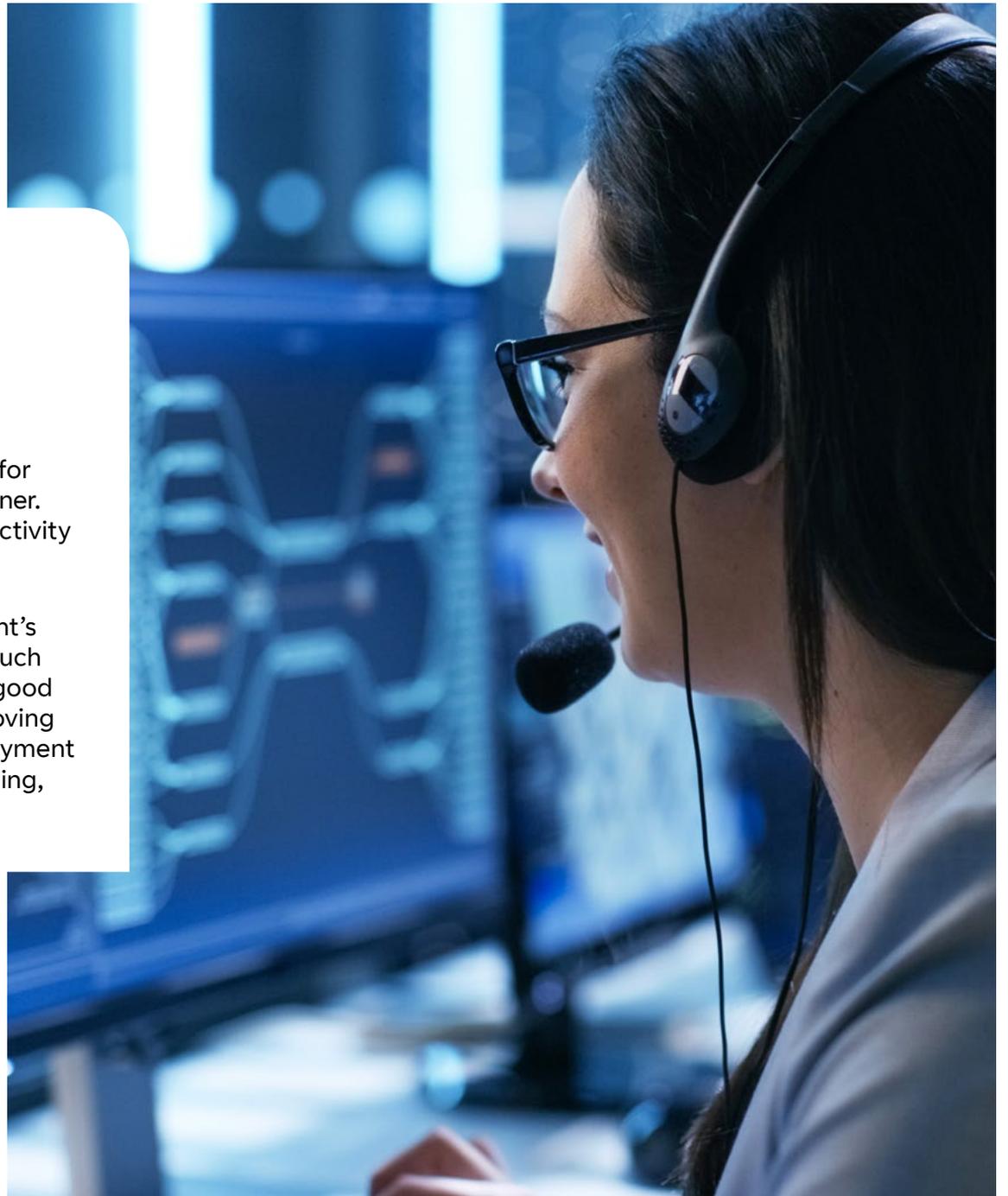
This document sets out the priorities we believe the next Scottish Government should consider ahead of the 2021 Scottish Parliament elections. We want everyone to be able to overcome the digital divide and look forward to continuing to work with the Scottish Government to highlight and address the barriers facing connectivity and skills in Scotland.

Mark Dames, BT Group Head of External Affairs Scotland

Networks and connectivity

The pandemic has accelerated the reliance on online technology for people and businesses across Scotland in an unprecedented manner. Never before have people needed so quickly to rely on digital connectivity to access basic services, work and education.

While progress continues with delivery of the Scottish Government's superfast R100 programme, the ambition must be to ensure as much of Scotland can access gigabit-capable full fibre broadband and good mobile coverage, future-proofing our digital infrastructure. Removing barriers to rollout and investment will improve the speed of deployment and the extent to which commercial build, rather than public funding, can deliver.



Reducing barriers to better digital connectivity in Scotland

We believe that the Build Back Better agenda must include an approach to reduce barriers across the UK, helping to connect the country, supporting businesses and households and allowing access to basic services. To support this, we're spending £12bn to reach 20 million homes in the UK by the mid-to-late 2020s. We've also commissioned research to look at the effect of reducing the barriers to rolling out full fibre broadband¹.

Around 17% of premises in Scotland have access to gigabit-capable full fibre broadband. Independent modelling shows that, under current conditions, this could increase to around 72% by 2025. But the same modelling shows that 98% of Scotland could be connected by 2025, were all these barriers removed. The date for reaching 100% full fibre could then be brought forward from 2033 to 2027.

Barriers which will have an effect on timescales include planning delays and access to skilled staff. The importance of local authorities supporting innovative building techniques is also key, as is reform to permit rules for laying fibre, making fibre compulsory in new builds, and making access to buildings and private land easier.

The next Scottish Government should:

- Recognise the importance of addressing each barrier in place of full fibre, to avoid putting Scotland at a disadvantage
- Work with companies in the information technology sector to find ways to re-use ducts and poles, and explore the use of alternative infrastructure so that fibre can be laid quickly and efficiently
- Appreciate and support the need for an effective deployment of personnel and an uplift in workforce effectiveness, and support businesses to achieve this
- Reduce local authority planning delays to allow for innovative deployment techniques and increase ease of access to street works permissions. At the same time, ensure that business rate relief on fibre broadband connections continues indefinitely. With the typical full fibre investment case timeframe being 15-20 years, this has major implications for the wider business case for full fibre investment
- Consider further planning reform to enable more efficient upgrading of masts to 5G, and multi-operator sharing of sites to support the Shared Rural Network.

Creating a culture of technological innovation

Businesses with established digital capabilities have been better able to weather the storm of the pandemic, and digital infrastructure has been vital. It's allowed people to keep working, students and children to keep learning, and helped safeguard normal social activities. The increased use of digital technologies has accelerated the pace of the Fourth Industrial Revolution, promising new growth routes for businesses and increased productivity.

In 2018 we, along with partners Scottish Council for Development and Industry, the Royal Society of Edinburgh and ScotlandIS, published *Automatic...for the People: Harnessing the Technologies of the Fourth Industrial Revolution to Increase Economic and Social Prosperity*. This was followed by its sister publication *Building a World-Leading AI and Data Strategy for an Inclusive Scotland*. Both reports address the challenges and opportunities for Scotland's economy and society represented by the Fourth Industrial Revolution.

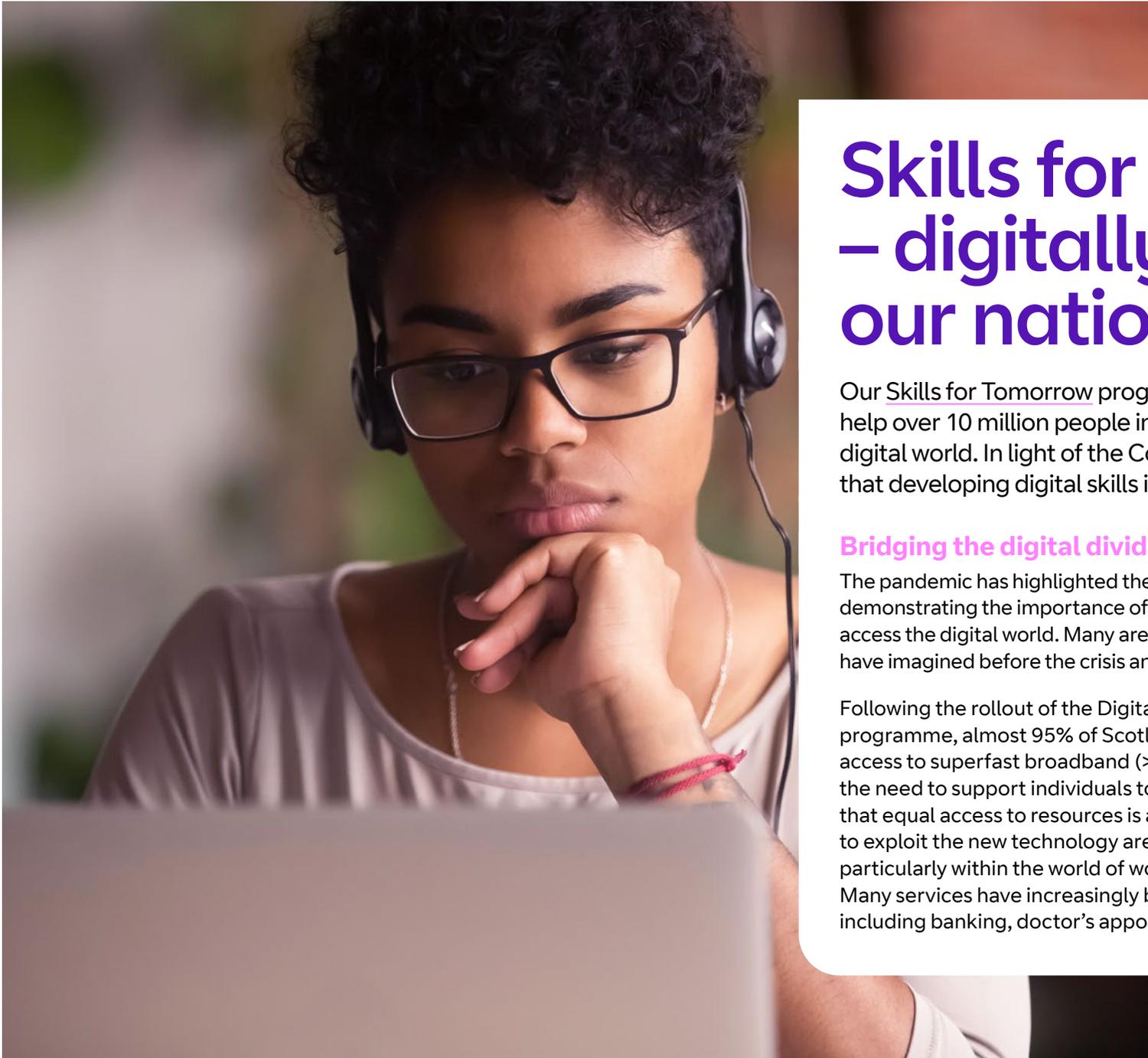
More broadly, we have supported the Scottish Government in its commitment to developing an Artificial Intelligence strategy for Scotland, which has the potential to fundamentally transform the delivery

of public and private services in the future, putting data at the heart of decision-making.

The next Scottish Government should:

- Fully realise the opportunities afforded by the technologies of the Fourth Industrial Revolution such as 5G, the Internet of Things, Artificial Intelligence, etc, by working with businesses to invest in the digital infrastructure that underpins these technologies: broadband.

¹The barriers may be summarised as: Fair and equal access to other utilities' infrastructure; access to skilled and lesser skilled staff; allowing use of innovative building techniques; reform of permit rules for laying fibre and making fibre compulsory in new builds; making access to buildings and private land easier; exempt all new fibre and gigabit capable infrastructure from business rates.



Skills for Tomorrow – digitally upskilling our nation

Our Skills for Tomorrow programme launched in October 2019, to help over 10 million people in the UK make the most of life in the digital world. In light of the Covid-19 pandemic, it's become clear that developing digital skills is now more important than ever.

Bridging the digital divide and upskilling the nation

The pandemic has highlighted the inequalities of digital exclusion while demonstrating the importance of having the right skills to navigate and access the digital world. Many are adapting to technology in ways we couldn't have imagined before the crisis and reaping the benefits of digital access.

Following the rollout of the Digital Scotland Superfast Broadband programme, almost 95% of Scotland's homes and businesses now have access to superfast broadband (>30Mbps). The pandemic has accelerated the need to support individuals to ensure an inclusive recovery, and that equal access to resources is available. Those who are less equipped to exploit the new technology are placed at a distinct disadvantage, particularly within the world of work and in accessing public services. Many services have increasingly become virtual throughout the pandemic - including banking, doctor's appointments, and grocery shopping.

In 2018, the Office for National Statistics found that 7% of Scotland's population has no basic digital skills. For these people, the pandemic has created an urgent need to develop digital skills in order to access basic services, work and education. But as we move into a streamlined, digitally supported world, we must make sure that no one is left behind. Our future prosperity and sustainable economic growth depend on having a workforce with the skills to cope flexibly with the changes brought about by globalisation, and the impacts of the fourth industrial revolution. This means re-designing education, skills, training, lifelong learning and employment for the new world of work, ensuring people and organisations have the skills and knowledge required to benefit from digital technology.

The next Scottish Government should:

- Reduce inequality by developing new digital skills for all ages through initiatives such as our Skills for Tomorrow programme. While the policy focus on connectivity and digital infrastructure must remain on the Scottish Government's agenda beyond the pandemic, providing support to develop the skills to access them will be vital to bridging the digital divide.

AI and data-driven technologies have the potential to help boost

productivity and generate higher economic growth. While innovation must be supported, especially in light of the economic recovery, it's been estimated that AI technologies could lead to the creation of 558,000 jobs and the displacement of 544,000 jobs in Scotland. While this would be a net benefit of 15,000, it would also signal the biggest shake-up in a lifetime to Scotland's labour market. As such, the next Scottish Government should:

- Recognise and support small and medium-sized enterprises that have been forced out of necessity to embrace increased digital sophistication at an accelerated pace
- Explore how digital technologies and innovation can help businesses respond to the crisis and contribute towards the economic recovery of Scotland, both in terms of actions that need to be put in place now and the steps that must be taken to maximise the potential of technology
- Prioritise the development of digital skills for workers across a range of different sectors, to make sure no one is left behind.

Supporting small businesses to adapt to challenges digitally

It's been recognised that the health and wellbeing of the nation needs to be placed on an equal footing

alongside GDP in terms of its importance as a national outcome measure, and that prepared and resilient public services are essential to dealing with future shocks to the system. The challenge is how we can work together through and beyond the Covid-19 crisis to create a more productive economy, tackle climate change and build a healthy and more equal society.

The next Scottish Government should:

- Help different sectors to work together, to create a more productive economy, which will require many government organisations to re-imagine how their services can be delivered online and at scale.

Using digital skills to overcome the Covid-19 crisis

We have identified three key areas where improving digital skills is vital to ensuring that individuals and businesses can face the challenges presented by Covid-19.

- Small businesses and job seekers need support to develop the digital skills to thrive in the current challenging economic environment.
- Families and teachers need support to help children stay safe, have fun and keep learning online.

- Older, vulnerable people and those with low or no digital skills need support to stay in touch with family and friends and access vital services.

In each of these areas, some people have adopted new digital skills but, significant challenges remain.

The next Scottish Government should:

- Consider the barriers in the way of people and businesses who've had to streamline digital skills at an advanced rate, due to the pandemic. It's vital that the next Scottish government work with the sector to provide support for people of all backgrounds to access services, so more of them can safely work and study from home, while keeping in touch with family and friends.

Innovation and economic recovery

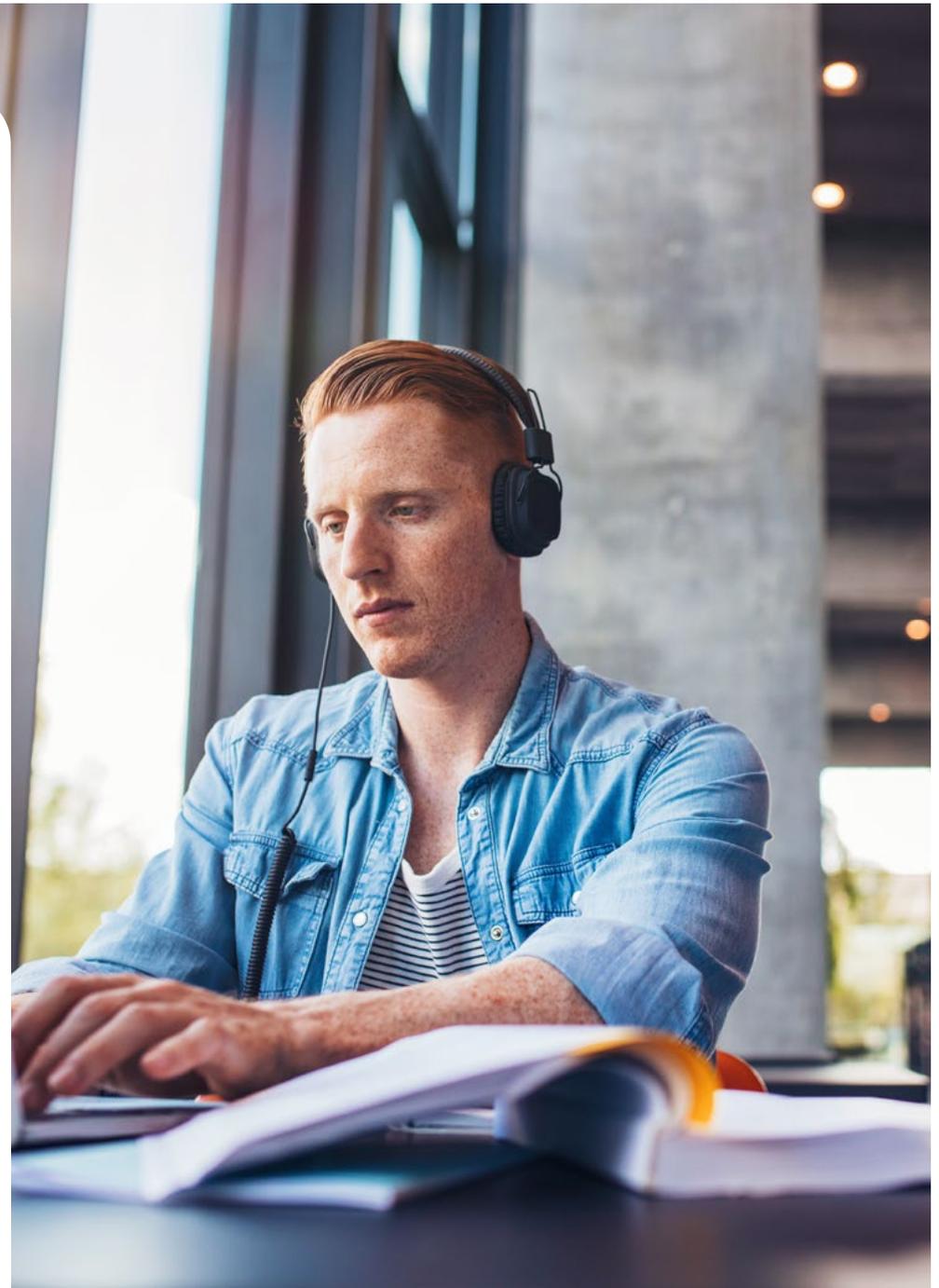
In the context of the Covid-19 crisis, Scotland is well positioned to build back its economy so that it's more resilient, inclusive and green. We believe that technology, research and innovation will play a crucial role towards achieving this goal. As Scotland looks towards easing out of the pandemic and into economic recovery, making sure the economy works within 'the new normal' will be critical.

Support universities in Scotland to develop applied research departments that stimulate the economy

Scottish universities have ensured that Scotland is a leading country in research and development, with a striking record of international collaboration and economic benefit to the Scottish economy. The research developed in Scotland impacts upon a wide range of beneficiaries, including many small and medium-sized enterprises.

Scotland's track record in research, innovation and skills provides an opportunity to lead globally – for instance in FinTech, advanced manufacturing and digital technologies. Many of the manufacturing jobs of the future will rely upon highly-skilled workers, innovation and a robust services sector providing ongoing support.

The Covid-19 pandemic has presented several challenges that require both a local and global response, highlighting an increased need for international collaboration.



To this end, Scotland's higher education sector will play a key role in driving economic recovery, with our universities alone contributing £1.5 billion towards Scotland's export total and around £7.1 billion GVA to the Scottish economy.

The next Scottish Government should:

- Continue to adequately resource Scottish universities so they are able to attract talented students and researchers. Scotland's world-class universities are central for a strong and sustainable recovery through their impacts on innovation and human capital
- Work with the UK Government to make sure that the UK Shared Prosperity Fund, as a replacement for EU Structural Funds, is funnelled to support innovation in Scottish universities.

University Applied Research Departments, dedicated to understanding and supporting regional businesses, will provide access not only to the institutions' own capabilities but to those across Scotland - the equivalent of the open innovation practised by most successful businesses. In this way, universities can play a key role in levelling up Scotland, realising economic and societal value directly from science.

As one of the UK's biggest investors in R&D, we're passionate about the impact of investment aligned to local industrial strategies.

The next Scottish Government should:

- Pilot the creation of Applied Research Departments in universities across Scotland. These should be tailored to the local economies that they support, and consider city and rural economies.

Ensuring smart cities and rural communities exist in a green recovery

There are more than 340,000 SMEs in Scotland, contributing 41% of private sector turnover and providing an estimated 1.2 million jobs. Policies designed to protect these businesses and support their recovery will be vital for the overall economy². Likewise, Scotland's rural economy is underpinned by the agriculture and tourism/ hospitality sectors. Digital offers businesses in these sectors significant opportunities to improve their productivity and reach new markets.

We strongly support the accelerated opportunities for a green growth recovery presented by the Covid-19 pandemic, and see a significant role for low carbon digital enabling technologies to help Scotland meet its net zero target by 2045.

For example, the adoption of environmental monitoring and traffic optimisation sensors that integrate into street furniture can provide data to enable smarter energy management for public estates.

In high emission sectors such as transport, electromobility is now a viable solution as the UK energy infrastructure becomes more affordable and further reduces emissions from power generation. To maximise these opportunities, policymakers should ensure greater coordination exists across local authorities and government to create an easier environment for planning, funding and infrastructure decisions.

We believe that innovation is not just for urban areas, with research providing evidence of the positive impact digital utilisation can have for rural communities and businesses. However, research shows the divide between rural and urban areas in the adoption of superfast broadband still exists.

The next Scottish Government should:

- Back policies to support digital transformation by small and medium-sized enterprises as the pandemic has accelerated the need for digital embedding in business

- Aid the adoption of remote working in organisations by utilising shared working spaces or hubs in local communities, that could become locations for face-to-face meetings as and when required
- Increase the provision of digital skills training, specifically for businesses and other organisations in rural areas
- Develop an action plan for improving rural businesses and communities' utilisation of digital infrastructure, and recognise the needs they have for assistance from the business support system in Scotland.

²Our Small Business Support Scheme introduces a range of measures to help small business boost their connectivity, cash flow and confidence, and ensure they become better positioned for economic recovery and growth as they emerge from the pandemic.



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