

Written evidence submitted by the Institution of Civil Engineers (PEG0231)

Executive summary

The responses and recommendations set out within this submission are targeted at improving the provision and performance of the UK's economic infrastructure networks. Investment in these networks can provide the foundations for wider growth as the UK recovers from the economic impacts of the Covid-19 pandemic.

The submission focuses on a selection of the questions that the Committee has identified as part of its inquiry and makes the following recommendations:

- Short- to medium-term investments in infrastructure should be targeted at speeding up the roll-out of both full-fibre and 5G communications, alongside improving active travel provision.
- Looking further ahead, investment in infrastructure should continue to be guided by long-term drivers, including population growth, the 2050 net-zero emissions target and the United Nations' Sustainable Development Goals.
- A UK investment bank should be established with a remit to invest in infrastructure projects aimed at helping to meet the 2050 net-zero emissions target.
- As part of its forthcoming National Infrastructure Strategy, the government should put in place a dedicated plan for delivering net-zero emissions. The plan should also outline the government's approach for developing the skills necessary to deliver the transition to net zero.
- Across England, regional infrastructure strategies should be developed to identify investment priorities and help drive wider economic growth.

What core/guiding principles should the Government adopt/prioritise in its recovery package, and why?

The impact of Covid-19 on the UK's economic infrastructure has meant that priorities for delivery have changed in the short to medium term. The pandemic has highlighted that in many sectors it is possible to operate remotely and therefore it is likely that in the future there will be a greater demand for more flexible working arrangements. As part of its approach to economic recovery, the government should accelerate the roll-out of both full-fibre and 5G communications infrastructure in order to facilitate this.

Since the outbreak of Covid-19, participation in active travel (running, cycling and walking) has risen significantly. The health benefits of engaging in regular exercise are well documented. However, to ensure that this trend continues it is imperative that appropriate investment is made in active travel infrastructure to provide the capacity and safe environment for the public to engage in these activities.

The impact of the pandemic on long-term strategic priorities has been more limited and it is imperative that the government's strategy for economic recovery recognises this. The UK's population growth is forecast to reach 75 million by 2050.¹ By the same year, the economy is legally obligated to be operating at net-zero emissions, while the UK has a commitment to play its part in achieving the United Nations' Sustainable Development Goals by 2030. All infrastructure and wider investment decisions that are made now must be cognisant of these long-term drivers.

It is also important to note that investment in infrastructure enables wider economic growth to take place. Analysis conducted by Oxera on behalf of ICE found that the Office for National Statistics estimates of multipliers by infrastructure sector range between 1.5 and 2.7. Therefore, for each £1 spent on infrastructure, there would be an additional £1.50–£2.70 of demand due to multiplier effects.²

¹ ICE (2016) [National Needs Assessment](#)

² ICE (2020) [Covid-19 and the New Normal for Infrastructure Systems – Next Steps](#)

How can the Government borrow and/or invest to help the UK deliver on these principles?

ICE has long advocated for the establishment of a UK investment bank to replace the loss of access to European Investment Bank finance following the completion of Brexit.³ The economic impact of Covid-19 has made this even more urgent.

The UK infrastructure sector has received finance from the European Investment Bank (EIB) for several decades, with billions of euros invested across a range of infrastructure projects. However, access to this finance will be lost as the UK leaves the European Union.

This is a big risk for the infrastructure sector as the EIB has played an important role in crowding-in other private investors to help finance infrastructure projects with risk profiles that may otherwise have precluded their involvement, such as early offshore wind projects. Often these would be projects that would generate positive environmental and social value outcomes for society.

Whether the government should give a higher priority to environmental goals in future support?

The impact the Covid-19 pandemic has had on the UK's economy has been significant, with GDP having fallen by a record 20.4% in Q2 2020.⁴ Increasing investment in projects or programmes that benefit the natural environment has too often been deprioritised in favour of more conventional spending on infrastructure that is actually detrimental to the sustainability agenda.

The pandemic provides a unique opportunity – from a standing start – to recalibrate the UK's economy around green growth and more specifically the 2050 net-zero emissions target. As a key contributor to the UK's emissions, it is critical that the infrastructure sector plays its part in achieving the target.

ICE's *State of the Nation 2020: Infrastructure and the 2050 Net-Zero Target* report⁵ sets out the need for the government's forthcoming National Infrastructure Strategy to include a dedicated plan for transitioning the UK's economic infrastructure networks to net zero. Developing and implementing such a plan should be a key plank in the government's approach to delivering a green recovery from the economic damage that Covid-19 has created.

How can the Government best retain key skills and reskill and upskill the UK workforce to support the recovery and sustainable growth?

Alongside the acceleration of the roll-out of full-fibre and 5G communications infrastructure, ICE has identified the need for digitalisation programmes already in train prior to Covid-19 to be prioritised as part of the economic recovery in order to improve resilience and performance across core networks.⁶ This includes the Digital Railway⁷ programme, alongside the development of a National Digital Twin.⁸ Prioritising investment in skills and training that will help facilitate digital transitions in networked infrastructure has important knock-on effects with regards to raising productivity levels in the wider economy.

There is also much to be done in terms of developing the workforce required for the infrastructure sector to play its part in meeting the 2050 net-zero emissions target. ICE's *State of the Nation 2020: Infrastructure and the 2050 Net-Zero Target* report⁹ set out the need for the government to identify current skills gaps, emerging skills requirements, barriers to upskilling and retraining, and education/training requirements so that the infrastructure workforce is well equipped to deliver the

³ ICE (2018) [State of the Nation 2018: Infrastructure Investment](#)

⁴ ONS (2020) [GDP First Quarterly Estimate, UK: April to June 2020](#)

⁵ ICE (2020) [State of the Nation 2020: Infrastructure and the 2050 Net-Zero Target](#)

⁶ ICE (2020) [Covid-19 and the New Normal for Infrastructure Systems – Next Steps](#)

⁷ Network Rail (2020) [Digital Railway](#)

⁸ Centre for Digital Built Britain (2020) [National Digital Twin Programme](#)

⁹ ICE (2020) [State of the Nation 2020: Infrastructure and the 2050 Net-Zero Target](#)

2050 target. A plan for building a net-zero workforce should also be included in the government's forthcoming National Infrastructure Strategy.

How should regional and local government in England, (including the role of powerhouses, LEPs and growth hubs, mayoralities, and councils) be reformed and better equipped to deliver growth locally?

Regional infrastructure strategies should be developed in England to enable more effective approaches to planning infrastructure. This should be achieved by reforming the role of subnational transport bodies (e.g. Transport for the North, Midlands Connect, England's Economic Heartland), so that they have a remit for articulating all regional infrastructure need rather than just transport provision. They would, in effect, become subnational infrastructure bodies (SIBs).

The objective would be for each SIB to work collaboratively with local delivery bodies, business groups and community organisations to develop a long-term and integrated strategy for economic infrastructure, alongside housing, for the given region that each SIB represents.¹⁰ A suite of regional infrastructure strategies would then plug into the government's forthcoming National Infrastructure Strategy to ensure the coordination of infrastructure provision at multiple geographic levels.

What role might Government play as a shareholder or investor in businesses post-pandemic and how this should be governed, actioned and held to account?

As outlined earlier in this paper, ICE believes that the government should establish a UK investment bank to replace loss of access to EIB finance. A UK investment bank would replace the functionality of the EIB and act as an anchor investor to crowd-in finance for key infrastructure projects from other institutional investors. The bank would be publicly owned, with a specific remit to invest in projects and programmes geared towards the 2050 net-zero emissions target.

Germany's KfW Bank is a publicly owned institution which invests heavily in infrastructure projects focused on protecting and enhancing the natural environment. In 2019 the bank made investments totalling €77.3 billion, with 38% of this spent on projects for climate and environmental protection.¹¹ In establishing a UK investment bank, the government should examine what lessons can be taken from the operation of KfW.

¹⁰ ICE (2020) ['Levelling Up' and the Role of Infrastructure: ICE Discussion Paper](#)

¹¹ KfW (2020) [2019 – A Successful Year for Promotion at KfW](#)

About ICE

Established in 1818 and with over 95,000 members worldwide, the Institution of Civil Engineers exists to deliver insights on infrastructure for societal benefit, using the professional engineering knowledge of our global membership.

September 2020