

Covid-19 and the UK's sustainability challenges – lessons for the new normal

June 2020

Purpose of this paper

The purpose of this insights paper is to examine the potential impact of Covid-19 on the UK's entrenched social, economic and environmental challenges. Our previous papers explored the short-term impact of Covid-19 on infrastructure demand and what this might mean in a post-lockdown world.¹ We have also explored the role infrastructure can play as an economic stimulus, and have looked at lessons that can be learnt from other crises.² This paper looks ahead to the lessons we can take from the pandemic as we plan for recovery and beyond.

This paper supports the call for evidence that ICE is running on behalf of the Infrastructure Client Group (and by extension the Construction Leadership Council) to identify how infrastructure delivery should be reinvented in the UK following Covid-19. Further details of this work are included at the end of this paper.

The paper is structured as follows:

- sustainable development in a UK context – the old normal
- the link between infrastructure and sustainable development
- lessons from Covid-19 for future sustainable development.

Sustainable development in a UK context – the old normal

Social distancing measures and the mothballing of parts of the economy, both in the UK and elsewhere, are having profound consequences, which will continue into the future. Forecasts from the Office for Budget Responsibility suggest a 35% fall in GDP in the second quarter of 2020 and unemployment rising by more than 2 million, to reach 10%.³

¹ ICE (2020) [The Use of Infrastructure Systems – Insights into the New Normal](#)

² ICE (2020) [Infrastructure as a Stimulus – Laying the Foundations for the New Normal](#)

³ Office for Budget Responsibility (2020) [Coronavirus Analysis](#)

Heading into the pandemic, the UK was not firing on all cylinders. Productivity growth was weak, the country faced a significant decarbonisation challenge and the life fortunes for some stood in stark contrast to others. These problems were a key focus of political debates, with the industrial strategy, levelling up and targeting net-zero greenhouse gas emissions by 2050 identified as political solutions.

Specifically:

- **Economic:** In the decade to Q4 of 2019, UK labour productivity has increased by an estimated annual average of just 0.3%, compared to 2% per year prior to the 2008 economic downturn.⁴ – this has an impact on international competitiveness and the sustainability of real wage growth.
- **Social:** London has the highest gross disposable household income per head, where, on average, each person had £27,825 available to spend or save in 2017; Wales had the lowest, at £15,754, and this compares with a UK average of £19,514 – the economic potential of large parts of the UK is not being realised, limiting opportunities for future generations and impacting wellbeing, life expectancy and fiscal sustainability.⁵
- **Environmental:** The Committee on Climate Change has calculated that just one of 25 policy actions recommended to the government in 2018 for achieving 80% emissions reductions had been delivered in full by July 2019⁶ – preventing catastrophic climate change is a global priority.

The UK has signed up to two key global agreements that directly address these economic, social and environmental challenges: the United Nations' Sustainable Development Goals (SDGs) and the Paris Climate Agreement. In the following section, we look at how the UK was performing prior to the pandemic in working towards the SDGs.

UK progress towards the Sustainable Development Goals

The Office for National Statistics monitors UK performance against the 232 indicators that sit behind the 17 SDGs. The UK government, in line with treaty obligations, publishes progress towards the SDGs – the first such progress report, the UK's Voluntary National Review (VNR), was published in June 2019.⁷

The VNR highlights a mixed picture and was criticised by the International Development Committee,⁸ who noted:

It skirted discussion of some serious issues, for instance: food security, poverty trends and EU withdrawal. The Secretary of State for International Development told the Committee there was 'nervousness' around the Government 'marking [its] own homework'.

The VNR showed that:

- 17% of the UK population live in households at risk of poverty

⁴ Office for National Statistics (2019) [Productivity economic commentary: October to December 2019](#)

⁵ Office for National Statistics (2019) [Regional Gross Disposable Household Income, UK: 1997 to 2017](#)

⁶ Committee on Climate Change (2019) [Summary Report: 2019 Progress Report to Parliament](#)

⁷ Department for International Development (2019) [UK's Voluntary National Review of the Sustainable Development Goals](#)

⁸ International Development Committee (2019) [Government's Voluntary National Review Casts Doubt on its Commitment to the Sustainable Development Goals](#)

- the adult mortality rate attributable to air pollution in England is 5.06%
- 11% of those aged 16 to 24 are not in education, employment or training
- 19.9% of dwellings in England fail the minimum 'decent homes standard'.

Alongside the government's monitoring of the SDGs, other organisations, including the UK Stakeholders for Sustainable Development (UKSSD), track progress. The UKSSD reviewed the UK's performance against the SDGs in 2018. ICE contributed to this review, which found that out of the 143 targets relevant to the domestic delivery of the SDGs, the UK is performing well on 24% of them. There are gaps in policy or inadequate performance for 57% of them, and 15% where there is little to no policy in place to address the target, or where performance is poor.⁹

The link between infrastructure and sustainable development

Infrastructure has a crucial role to play in achieving the SDGs: not only is there an infrastructure SDG (SDG 9), but research has shown that 72% of the SDG indicators are linked to networked infrastructure investment and 92% when all forms of infrastructure are considered.¹⁰

Strong synergies exist between SDG 9 (infrastructure) and SDG 7 (energy), SDG 8 (decent work and economic growth), SDG 10 (reducing inequalities) and SDG 11 (sustainable cities and communities). There is also a strong link with SDG 14 (protecting habitats) and SDG 15 (biodiversity).¹¹

The critical role of infrastructure for the Sustainable Development Goals¹²

When it comes to the economy, infrastructure dividends range from the jobs created during construction and maintenance to the ability for infrastructure to generate economic activity.

In protecting the environment, infrastructure assets play a key role in conserving natural resources and reducing the impact of climate change.

When equitable access is assured, society benefits from infrastructure since it delivers the services (such as power supplies, healthcare services and sewerage networks) that are essential for sustainable development.

The Enabling Better Infrastructure Programme¹³ highlighted the role the SDGs can play in providing a baseline for strategic infrastructure planning, ensuring that both national need and national vision are married together in a cohesive plan for the future. Despite this important role, few developed countries use the SDGs or reference them as part of their infrastructure plans.¹⁴

⁹ UK Stakeholders for Sustainable Development (2018) [Measuring Up: How the UK is Performing on the UN Sustainable Development Goals](#)

¹⁰ ICE Lecture (2020) ICE Strategy Sessions: [How can infrastructure help achieve the UN Sustainable Development Goals?](#)

¹¹ UK Stakeholders for Sustainable Development (2018) [Measuring Up: How the UK is Performing on the UN Sustainable Development Goals](#)

¹² Economist Intelligence Unit (2019) [The Critical Role of Infrastructure for the Sustainable Development Goals](#)

¹³ ICE (2020) [Enabling Better Infrastructure](#)

¹⁴ Principles for Responsible Investment (2020) [Are National Infrastructure Plans SDG-Aligned, and How Can Investors Play their Part?](#)

Given that these are goals being targeted by all countries, there is an opportunity for countries that are making good progress to play a leadership role and to reap the benefits of selling know-how on how to achieve the goals, particularly through infrastructure investment.

Lessons from Covid-19 for future sustainable development

UN analysis¹⁵ shows that the Covid-19 crisis is likely to have a profound and negative effect on sustainable development efforts. A prolonged global economic slowdown will adversely impact the implementation of the SDGs' 2030 Agenda and the Paris Climate Agreement.

The most vulnerable, including women, children, the elderly and informal workers, will be hit the hardest. The impact on the environment, on the other hand, is likely to be positive in the short term, as the drastic reduction in economic activity brought about by the crisis has reduced CO2 emissions and pollution in many areas.¹⁶

Impacts of the Covid-19 crisis include: a global recession, supply-chain disruptions halting manufacturing, a collapse in commodity prices, a loss of between 5 million and 25 million jobs, a loss in labour income in the range of US\$ 860 billion to US\$ 3.4 trillion, and weakened currencies and government balance sheets.¹⁷

How will Covid-19 impact on the UK's ability to achieve the SDGs?

ICE UK Fellows were surveyed for their views on the likely impact (positive, mixed or negative) of Covid-19 on the UK's ability to achieve the Sustainable Development Goals.¹⁸ Just over a third felt the impact would be mixed.

The survey found that SDG 1 (ending poverty in all its forms within the UK) and SDG 8 (sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all) were expected to be negatively impacted. There was less agreement on which SDGs would be positively impacted: respondents' opinions were spread between SDG 3 (ensuring healthy lives and promoting wellbeing for all at all ages), SDG 9 (building resilient infrastructure, inclusive and sustainable industrialisation and fostering innovation) and SDG 13 (taking urgent action to combat climate change and its impacts).

Regarding the impact of the pandemic on SDG 13 (taking urgent action to combat climate change and its impacts), respondents were split roughly equally between predicting a positive, negative and mixed impact. Diagram 1, on the next page, shows the spread of opinion on positive and negative impacts only.

¹⁵ United Nations (2020) [Shared responsibility, global solidarity: Responding to the socio-economic impacts of COVID-19](#)

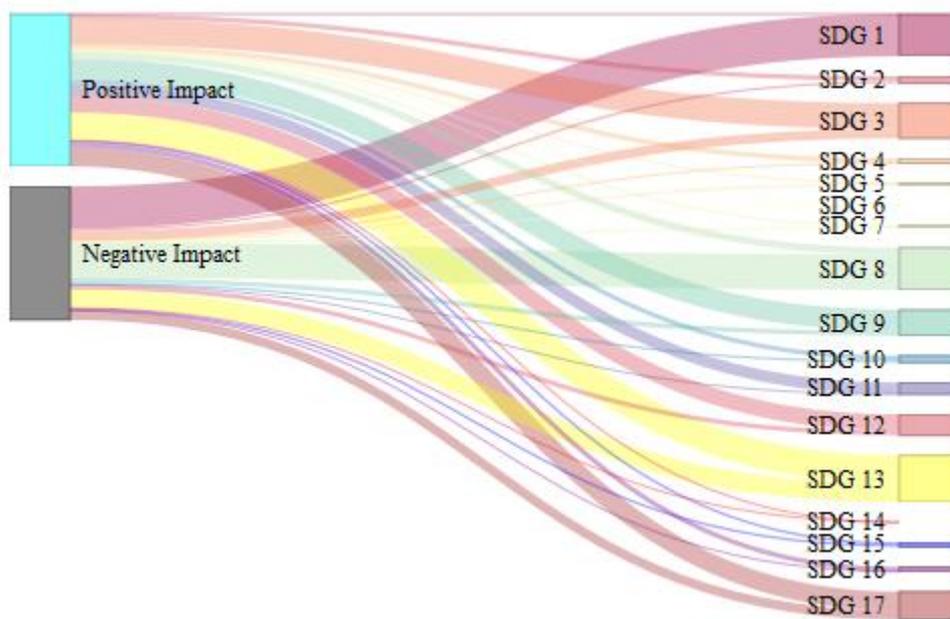
¹⁶ Ibid

¹⁷ Ibid

¹⁸ The base size was 227 Fellows, survey conducted in April 2020

The results reflect findings from interviews and other sources used for this paper: the economic impact will push more people towards the poverty line, with uncertainty around the economic bounce-back. There may be some benefits for combatting climate change (if more people work from home), a concerted effort to improve the health system (to increase spare capacity) and the potential for infrastructure investment to support the recovery.

Diagram 1: The predicted impact of Covid-19 on achieving the SDGs, according to a survey of ICE Fellows



Lessons as we plan the recovery

Some initial lessons have been highlighted as part of our study, and these are explored in further detail in the Green Paper.

- The pandemic has shown just how connected we are through our actions on this planet. There are lessons here for how we view infrastructure as a system of systems supporting societal outcomes.
- Socio-economic divisions have also been brought into sharp focus, in particular key workers not being treated as key when it comes to health outcomes and access to transport and housing.
- Public behaviours can change quickly when the public are clear about the outcome and how individual action contributes to the whole. There are lessons here for unpacking targets such as the 2050 net-zero target. On the net-zero target, while air quality has improved during the Covid-19 crisis, this has

come at the expense of the economy. Plans to encourage a green recovery should heed this lesson and factor in social and economic sustainability in the pursuit of net zero.

- Having strategic access to manufacturing capability is important to deliver wider social outcomes. There are lessons here for infrastructure supply chains and access to materials, goods and services.
- There is value in being prepared for risks: while on balance infrastructure demand has gone down, not up, during the pandemic, the next crisis may bring a different impact. Infrastructure networks need to build in the required spare capacity linked to a national risk register.

Green Paper and call for evidence

This insights paper, as detailed at the outset, has been produced to help support a wider piece of work around future infrastructure provision in the UK that ICE is progressing on behalf of the ICG.

More specifically, a Green Paper has been published that will enable the ICG to develop a road map, as part of the Construction Leadership Council's Industry Recovery Plan, to determine how infrastructure delivery should be reinvented in the UK following Covid-19.

The Green Paper, which is accessible at this [link](#), contains a call for evidence that is being run until 14 June 2020. Representations can be made directly to policy@ice.org.uk.

The questions are as follows:

Question 1: What other factors, or combination of factors, will determine attitudes to public life as we transition to a new normal?

Question 2: What other systemic changes, driven by lessons learned during the lockdown period, can we expect to be important as part of the new normal?

Question 3: Are our assumptions of the new priorities for infrastructure correct?

Question 4: What other changes to infrastructure provision will be needed and what assumptions sit behind that need?

Question 5: Have we made the correct assumptions on the changes in delivery that will be required, to deliver infrastructure as part of the new normal?

Question 6: What are the intermediate steps required to move us towards these new approaches to delivery?

Question 7: What other fundamental shifts are required to deliver concrete and long-lasting change in how we operationalise to deliver infrastructure to achieve societal requirements?

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.

For more information please contact:

Chris Richards, Director of Policy, ICE

Email: policy@ice.org.uk