Executive summary

The fight for cleaner air is one of liveability. What changes and investments are society willing to take for their place to be a more pleasant one to live and work in? How willing are people, businesses and governments to change the way they operate for a more sustainable economy? At what point do questions of future planning and prosperity become those that must be answered now?

Given clean air is an issue that spans boundaries – global, national and local – there is no single agent or institution that can instigate change in the direction and at the scale required. Moreover, there is no ready made solution. In the UK, 95% of Air Quality Management Areas are associated with transport sources but beyond this common element, every place's air quality problem looks different – its source, its extent, its impact – and so, therefore, should each place's policy response. As trends in lifestyles and technology continue to change, and people continue to move to cities, what *is* common to all air quality strategies across the country, and the world, is the central role of infrastructure. By improving the efficiencies of existing infrastructure, and building much-needed new infrastructure, places can shift people and businesses onto lower-emitting transport or can reduce the need to travel.

Following a raft of government strategies for tackling air quality on a national scale – for instance the Department for Environment, Food and Rural Affairs's (Defra's) Clean Air Strategy and the Department for Transport's (DfT's) Road to Zero strategy – this report therefore asks what can be done locally as part of modern infrastructure strategies. With the policy and procurement capacity of the local state, and its convening power, there is much places can do within their tight financial situations. Yet it is also true that better infrastructure costs money. A large portion of this should come from central government, particularly in areas with a limited fiscal base. However, places should also take the lead on arranging funding themselves. Both in attracting private capital and using local tax powers more actively.

What should a modern infrastructure strategy include?

From ship idling to online delivery markets, there are many issues a place can look to address as part of their infrastructure strategy. This report puts forward a number of interventions to that end. Yet, the reality is there is no one suite of reforms we can recommend. Infrastructure need varies across the country, while causes of dirty air are often hyper-local. They depend on the economic make-up of a place and, moreover, the capacity of people and businesses to adapt varies significantly. Despite this, some needs should be consistent across infrastructure strategies:

• **Strategic leadership**. Alongside air quality action plans led by individual local authorities, strategic authorities (combined authorities and county councils) should respond to air quality as part of their infrastructure strategies - some, such as Greater Manchester, already do this. This should include identifying the local infrastructure gap and reviewing funding and financing options for the delivery of better infrastructure in their area.

- **Collecting and using data more**. To enable better-designed policies, and wider use of technologies across a place and its population, greater collection and use of data intelligence is essential.
- **Taking a punt**. Whether it be people's use and adaptability to new technologies, or linking infrastructure funding to a growing tax base, many of the initiatives of a modern and more powerful infrastructure strategy will necessitate greater risk-taking by the public and private sectors.
- **Working within legal parameters**. High Court rulings mean places need to accelerate their air quality strategies. Achieving cleaner air quicker is clearly desirable, yet the rulings also pressure places to introduce 'visible' policies. The aim must remain the most effective and most viable policies.
- Working within political parameters. Many policy measures for tackling air quality carry significant trade-offs. Each necessitates one portion of society, or one set of organisations, changing their behaviour and sometimes that may bring a financial burden. As a result, it is important measures are supported by the public and businesses.
- Focusing on all causes of pollution. As recognised in government's Clean Air Strategy, there are many types and sources of pollution. For places, this necessitates a focus on all polluters and all types of transport infrastructure roads and vehicles, idling ships and ports, planes and airports.

Financing and funding better infrastructure

A more powerful infrastructure strategy necessitates greater expenditure. Whether physical or digital, the reality is better infrastructure costs money. In this regard, there is opportunity in government's forthcoming Spending Review. Government should announce cleaner air as a main objective of future spending pots. This should be both in broad principles of all infrastructure spend and in the form of a dedicated funding pot. However, places must also take the lead in arranging funding for better infrastructure in their area. History suggests much-needed infrastructure will go unbuilt if places rely solely on government. In this regard, two themes stand out:

Firstly, greater partnering with private sources of capital. While not every project in every place will be suitable for private finance, case studies across the world suggest with the right governance model, private and long-term capital can take a more prominent role in local infrastructure strategies. A key option to explore is asset recycling, a model where the state leases a public asset to a private company, typically a pension fund. The state forgoes the revenues raised in the lease period and the capital generated from leasing the asset is invested in a new piece of infrastructure.

Secondly, using local tax powers more actively. City-region mayors should look to use their new powers to introduce business rates supplements and council tax precepts for funding new infrastructure (in many cases they already are). Government should also extend these powers to county councils and look to pilot a payroll levy and tourist tax in places which hypothecate raised-revenues to better infrastructure.

Central support

There is a great deal places can do in delivering more powerful infrastructure strategies – for cleaner air, but also for wider prosperity – but the role of central government remains essential. Both in coordinating and investing in infrastructure that needs a national policy response, for instance electric vehicles, and in supporting places where air quality is poor and their capacity to respond is weak, for instance mid-tier cities like Hull and Stoke-on-Trent. Places with poor air quality are often also associated with wider social deprivation, and so are even less likely to be able to fund solutions.

