

## **How can we build a green economy?**

### **Seven priorities for infrastructure policy**

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Without major new policies in the very near future, the UK will not be on track to meet its goal of achieving net zero greenhouse gas emissions in 2050. Infrastructure forms the underlying building blocks of the economy and is a key enabler for innovative solutions needed to achieve a green economy.

Getting infrastructure policy right is essential to cut carbon quickly, as well as to prepare the UK for the impacts of a warming world. Given the carbon intensive nature of existing infrastructure and the long investment cycles for new infrastructure, policy change is urgently needed.

Failing to address this fundamental issue will hold the UK back, making action to decarbonise more challenging, and stopping UK citizens and businesses gaining all the benefits of a green economy.

University College London's [Green Innovation Policy Commission](#) is promoting seven priorities that will ensure infrastructure policy effectively drives economic transition at the speed needed. The commission believes that the government's infrastructure policy should:

#### **Be consistent with a net zero world and accelerate green innovation**

For effective decarbonisation, infrastructure choices should be part of a package of transition policies, including effective pricing, innovation support and intelligent regulation, aimed at achieving a green economy.

#### **Promote rapid decarbonisation and deliver infrastructure with a minimal environmental footprint**

All infrastructure choices should promote low carbon economic activity, including promoting cleaner transport, efficient homes and a more circular, resource efficient economy. Co-ordinated system planning should support optimal delivery and utilisation of new and existing infrastructure. Furthermore, it is vital that the UK develops cleaner approaches to building infrastructure, by using cleaner materials, better design and improved maintenance for greater durability.

#### **Experiment at scale where infrastructure options remain uncertain**

No-one can yet say whether, in a net zero world, homes will be heated with electricity, district heating or hydrogen boilers; or how lorries and aeroplanes will be fuelled. In such uncertain areas, policy must enable research, development and experimentation at scale, to support strategic long term decisions.

## **Go beyond the deployment of hard infrastructure**

Moving to a green economy requires new types infrastructure (such as digital systems) and approaches (such as inter-modal travel) to make better use of existing assets and technologies, and support greater demand management.

## **Maximise synergies across sectors**

Existing infrastructure regulation and policy was designed for limited overlap across sectors. But, as the digital revolution unfolds, and as transport and heat are decarbonised, there will be enormous opportunities for synergies between different sectors. It is important that these opportunities are not squandered by a failure to develop new approaches.

## **See natural assets as a major opportunity**

Natural solutions, or 'ecosystem services', can provide effective and cheaper alternatives to grey infrastructure, for example for flood alleviation, while also restoring and protecting natural habitats, sequestering carbon and supporting greater societal wellbeing.

## **Engage with the public and local perspectives**

Some areas of green innovation, particularly around transport, require regionally specific solutions and local participation. And, more generally, public engagement will be critical to find common ground between different stakeholders and to support effective and resilient infrastructure choices.

UCL's Green Innovation Policy Commission is researching in depth the policy needed to address these priorities. It will report in 2020.