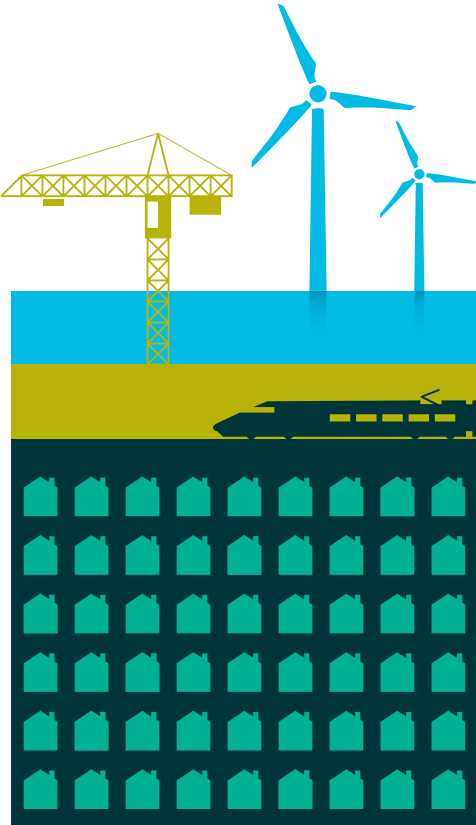


The future of UK infrastructure



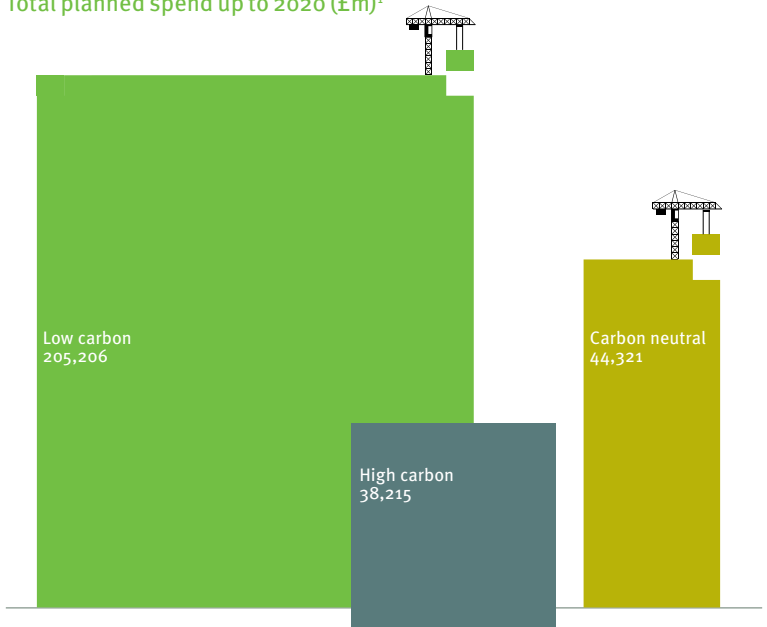
**green
alliance...**

The new giants of UK infrastructure

The UK is ahead in the global trend to make new infrastructure low carbon. We are already a world leader in offshore wind and planned low carbon infrastructure projects make up over 70 per cent of the Treasury's infrastructure pipeline. This will create a cleaner, more productive economy that will allow the UK to prosper while respecting environmental limits. The readiness of many of these projects also means they can have a significant short term growth impact, creating jobs and attracting investment at a time when the country desperately needs them. Increasing private sector confidence that the UK is committed to decarbonisation is essential to fully unlock investment.

The largest infrastructure projects in the UK are low carbon

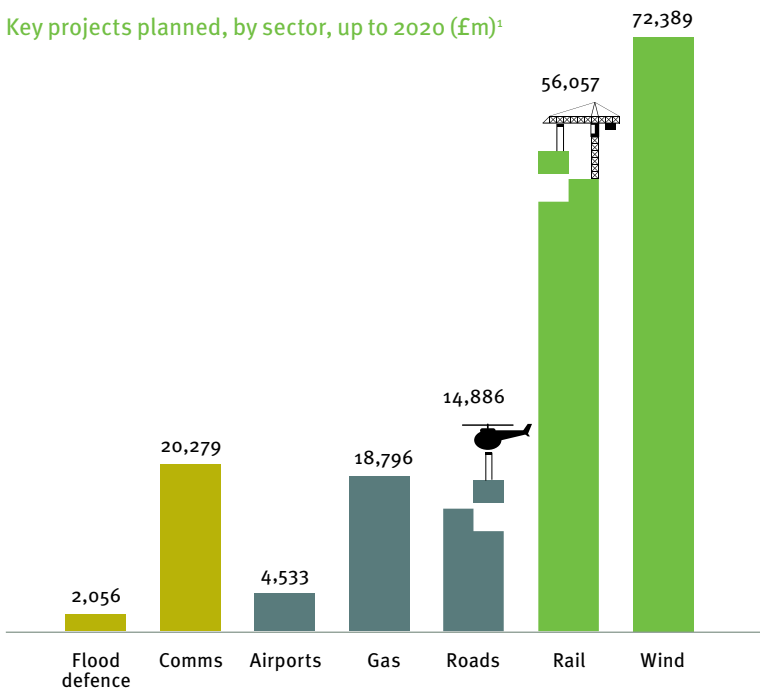
Total planned spend up to 2020 (£m)¹



“Investing in stronger communities, investing in better infrastructure, investing in new sources of energy. That is how we will build a stronger economy.”

Rt Hon Danny Alexander MP, 2013²

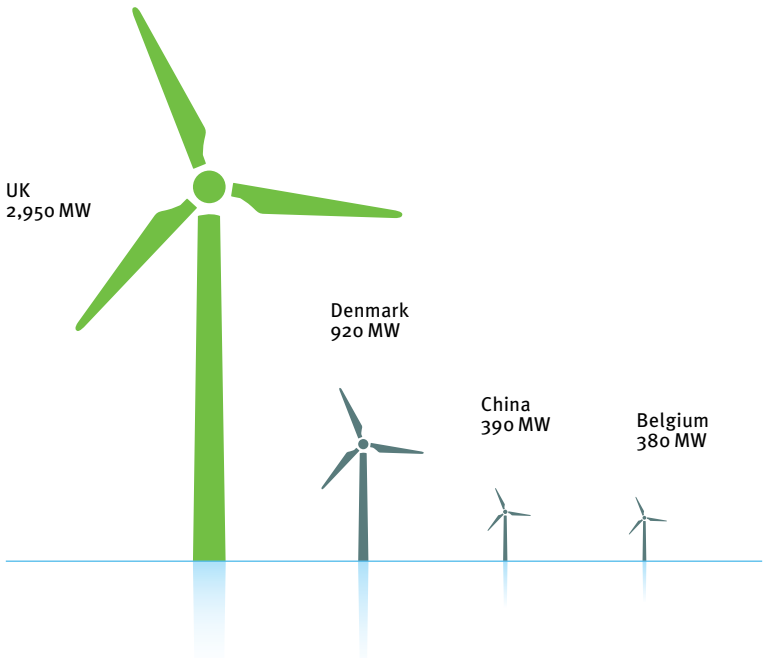
Key projects planned, by sector, up to 2020 (£m)¹



“The great economic revolutions in history occur when new communication technologies converge with new energy systems.” Jeremy Rifkin, 2011³

The UK dominates the world in offshore wind

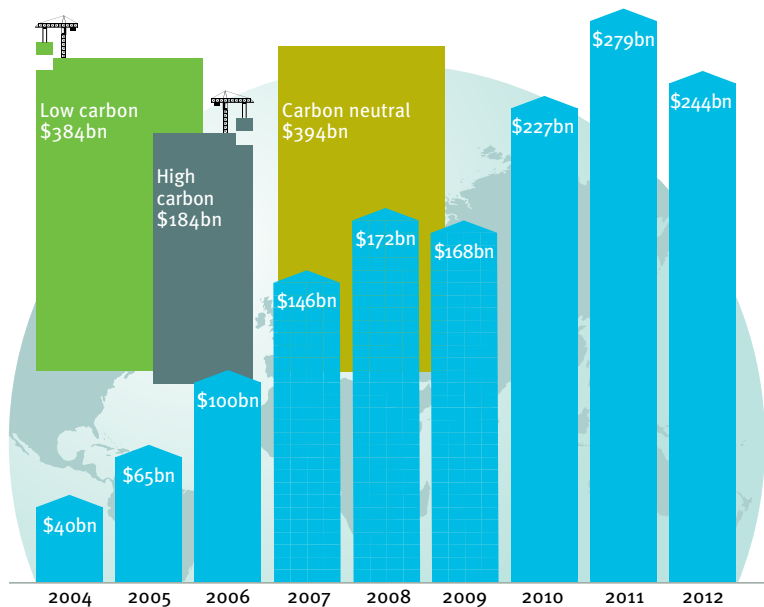
Cumulative installed capacity in 2012⁴



“We’re number one in the world for offshore wind. Number one in the world for tidal power. We’re showing we can do it.”
Prime Minister David Cameron, 2012⁵

A major global infrastructure investment trend

Spending on the top 100 global infrastructure projects in 2012⁶

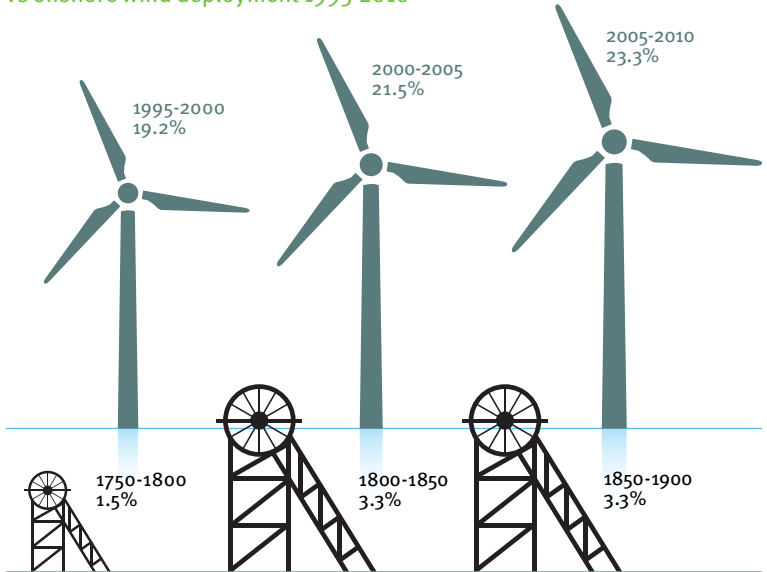


Global investment in renewables⁷

“We believe renewables is the better investment right now.”
Warren Buffet’s MidAmerican Energy Holdings, 2012⁸

A faster, cleaner industrial revolution

Average annual increase in coal mining 1750-1900⁹
vs onshore wind deployment 1995-2010¹⁰



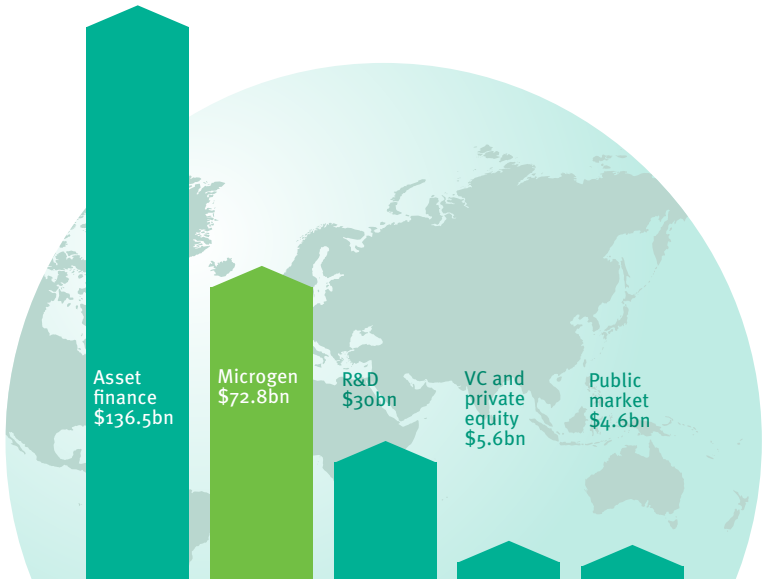
3.2%
of the population worked in iron and steel
in 1851 and the green economy in 2011¹¹

The hidden giants of UK infrastructure

Alongside large scale low carbon infrastructure projects there's a new opportunity. Major change is occurring through a multitude of small scale projects and activities, modernising and improving our underlying energy infrastructure. Technology has shrunk: computers fit in pockets, power can be generated in our backyards. The scale and shape of our vital infrastructure is changing. This infrastructure is more dispersed and less obvious than traditional projects but taken together it is no less transformative. It is changing how people control their energy use and how energy is harnessed. This constitutes a major new source of investment and resilience for local economies across the country. An effective national strategy is needed that recognises the role decentralised infrastructure can play.

Microgen is a huge but hidden energy infrastructure...

Microgen was the second largest investment in cleantech by G20 countries in 2012¹²



“One can imagine a day when battery storage technology or micro turbines could allow customers to be electric grid independent.”

Edison Electric Institute, 2013¹³

...which has more diverse ownership than conventional energy

UK renewables ownership¹⁴

14%

Small solar PV owners
had the greatest share
of installed renewable
capacity in 2011



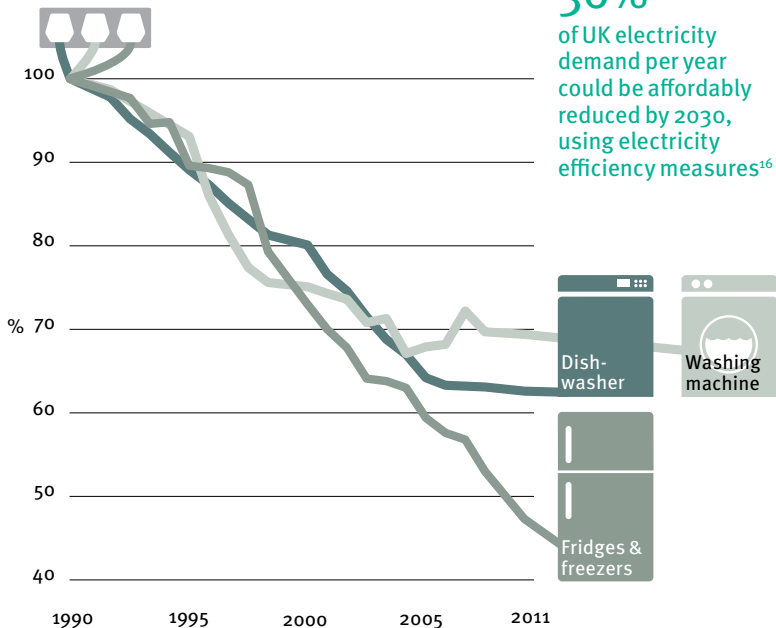
Other business and
microgen owners
53%

Big six
47%

“The Big 6 have only a 47% share of UK renewable capacity compared with 70% of all generation capacity.”
Bloomberg New Energy Finance, 2012¹⁴

Energy saving appliances are a second hidden infrastructure...

White goods energy consumption¹⁵

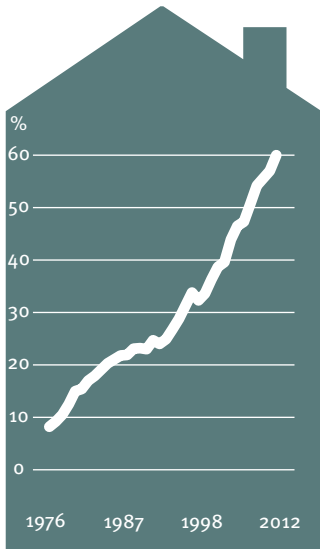


“Let’s cut in half the energy wasted by our homes and businesses over the next twenty years.”

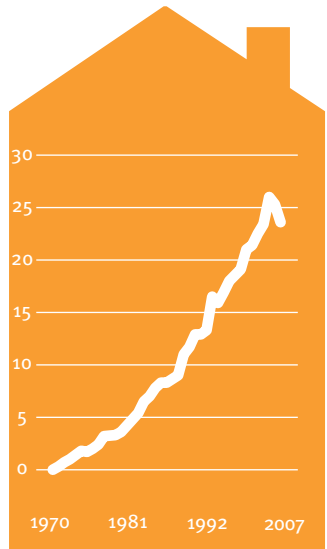
US President Barack Obama, 2013¹⁷

...which reduces costs and creates a more resilient economy

Suitable properties with cavity wall insulation¹⁸



Energy saved by better heating systems (million tonnes of oil equivalent)¹⁹



“We need to move from incremental steps forward on household energy efficiency to a comprehensive national plan.”
Rt Hon Ed Miliband MP, 2009²⁰

Sources

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Green Alliance
36 Buckingham Palace Road
London, SW1W 0RE

020 7233 7433
ga@green-alliance.org.uk
www.green-alliance.org.uk

blog: greenallianceblog.org.uk
twitter: @GreenAllianceUK

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Author

Alastair Harper, senior policy adviser
aharper@green-alliance.org.uk

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