

## Update on the National Infrastructure Assessment

The long-awaited National Infrastructure Commission National Infrastructure Assessment (NIA) was published on Tuesday 10th July 2018.

It calls on the Government to take decisive action, and makes a number of recommendations on how the UK's energy, transport, digital / comms, water, waste water and waste infrastructure needs should be delivered over the next 10 to 30 years (2020 to 2050) in the context of significant population and economic growth.

The NIA will be debated in Parliament, and Government is required to respond to all recommendations, which represent a significant investment programme to upgrade the UK's infrastructure (but within the 1.2% of GDP target that Government set the NIC).

The final NIA builds on the October 2017 Draft NIA's key challenges of tackling congestion, capacity and reducing emissions by:

- Prioritising devolved, long-term and stable funding for city infrastructure.
- Building the UK's water and digital capacity.
- Reducing carbon emissions by moving to an energy system mainly powered by renewable energy such as solar and wind.
- Focusing on improving quality of life through protecting homes from flooding, reducing driving and energy system costs through changing to electric cars, and reducing the amount of waste to incinerators, landfill and the oceans, with better design and more efficient and stable funding and financing saving money, reducing risk, and adding value.
- Touching on the interaction between infrastructure and housing.

Recommendations (core plans in bold) include:

### Low Cost Carbon Energy

- **50% of the UK's power to be provided by renewables by 2030.**
- The UK needs to continue to move towards low-carbon and renewable sources for both power and heating, which, combined with a major switch to electric vehicles, will result in customers in 2050 paying the same in real terms as they do today.
- To further reduce emissions, heating must not be provided by natural gas.
- Delivering a low cost, low carbon heating system is the major outstanding challenge. Actions required now, include:
  - \* Improving the efficiency of buildings.
  - \* Establishing the safety case for using hydrogen for heating, followed by trials at a community scale, alongside carbon capture and storage.

- \* Collecting further data on the performance of heat pumps, to support future decisions.
- Government should not agree support for more than one nuclear power station after Hinckley Point C before 2025.
- Increased system flexibility, in line with the recommendations in the NIC's Smart Power report.
- Where possible, the NIC favours the use of existing market mechanisms (contracts for difference and the capacity market) to avoid creating more uncertainty, but there could be incremental improvements.
- All renewables should be able to compete as there is no longer a case for any bilateral deals, including for tidal.

## Digital Technology

- **Nationwide full fibre broadband by 2033.**
- Government should devise a National Broadband Plan by Spring 2019 (end December 2018 in the text), to deliver full fibre connections across the UK, including rural areas, ensuring access to full fibre by 15 million homes and businesses by 2025; 25 million by 2030, and all homes and businesses connected by 2033.
- Ofcom should provide commercial certainty to investors, to encourage further private sector investment of full fibre.
- Government subsidies should be provided for those areas where private investors will not supply full fibre.

## Transport

- **Preparing for 100 per cent electric vehicle sales by 2030.**
- Government should work with local authorities and private companies to deliver a national network of electric vehicle charging points, including requiring local authorities to free up 5% of their parking spaces by 2020 and 25% by 2025, and ensuring that the impacts of and autonomous vehicles are taken into account when planning for the next rail control period / Road Investment Strategy.
- In areas where private investors won't install charging equipment, Government should subsidise.
- Whilst rapid / fast charging should be available to tackle 'anxiety range', the vast majority of vehicles should be charged overnight, to smooth the electricity demand curve and increase energy system efficiency.
- A framework should be developed to assess potential impacts of electric, connected and autonomous vehicles, with an initial framework put together before the next five year planning cycle for rail and major roads begins in the early 2020s.

## Encouraging City Growth

- **£43 billion of stable long term transport funding should be provided for cities.**
- Metro Mayors and City Leaders should develop and implement integrated long-term strategies for transport, employment and housing in their areas, to support economic growth.
- Government should devolve further powers and provide five year stable budgets from 2021.

- For cities that face the most severe capacity constraints, and with the most potential for growth, there should be additional funding to support major infrastructure upgrade programmes, which would be agreed between the cities and central Government.

## Water / Floods

- **Ensuring resilience to extreme drought**, by Government putting in place a long-term strategy to deliver a nationwide standard of flood resilience by 2050 (0.5% of likelihood by 2050 where feasible, but 0.1% for densely populated areas where the impact of flooding is much greater), with a significant increase in funding.
- The Environment Agency should update plans for all catchments / coastal cells in England before the end of 2023.
- Working with Ofwat and water companies, Government should ensure increased capacity of the water supply system to boost the country's resilience to drought, whilst also managing demand and reducing leakage, through delivering a national water transfer network and additional water supply (reservoirs or water re-use) by the 2030s, and halving leakage by 2050, together with greater smart metering.

## Waste

- **Three quarters of plastic packaging to be recycled by 2030.**
- Better packaging design, clearer labelling, fewer hard to recycle plastics, and tougher recycling targets (65% of municipal waste and 75% of plastic packaging by 2030) could reduce residual waste and mitigate the need to build additional infrastructure.
- New national rules on recycling should be introduced, with:
  - \* Restrictions on the hardest-to-recycle plastics, limiting the amount of plastics being incinerated.
  - \* Separation of food to facilitate biogas creation, to heat homes and potentially as a transport fuel.

## Choosing and Designing Infrastructure

- Government should develop an effective methodology to measure the quality, cost and benefits of the UK's current infrastructure to reliably inform assessments of future needs, with all government departments and agencies collecting and publishing data for major infrastructure projects.
- Good design - all nationally significant infrastructure projects (NSIPs) should have a board level design champion and use a Design Panel to deliver good design that saves money, reduces risks, maximises value, and delivers more projects on time.
- The NIC, advised by a National Infrastructure Design Group, will publish a set of design principles to inform this.

## Funding and Financing

- In the context of risks to state funding, a UK finance institution should be established, if access to funding ceases post Brexit.
- More funding mechanisms should be made available to Local Authorities to enable them to capture a greater share of the uplift in land value that can occur with infrastructure investment, making it easier to raise business rate supplements for up to one third of scheme costs.

- More powers should be given to Local Authorities to levy zonal precepts on council tax where public infrastructure investment drives up property values.
- The NIC will engage with stakeholders on a revised road taxation system to be fairer, more sustainable and reduce the negative impact of driving.

## **Next Steps**

- A framework is needed to manage the impact of Brexit on the construction skills base and supply chain.
- Government has committed to lay the NIA before Parliament and respond to its recommendations within 6 months (with a final deadline of 1 year).

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