

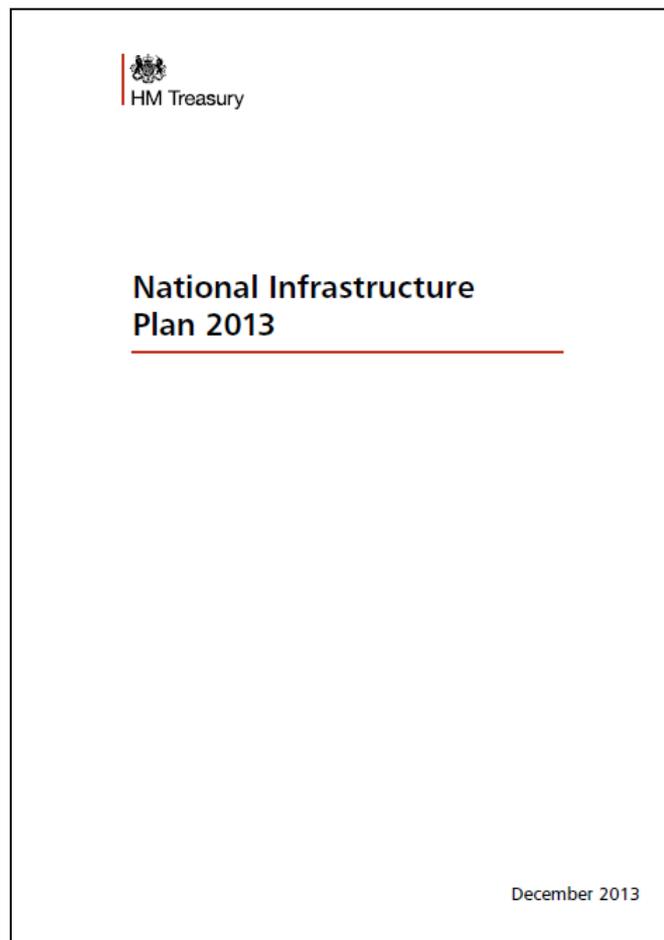


Futureproofing in Asset Management

Institute for Manufacturing, Cambridge, April 2nd 2014

Keith Waller

Infrastructure UK



Content

- Infrastructure investment in the UK
 - National Infrastructure Plan
- Improving delivery and asset performance
 - Infrastructure Cost Review
- Next steps





What we do:

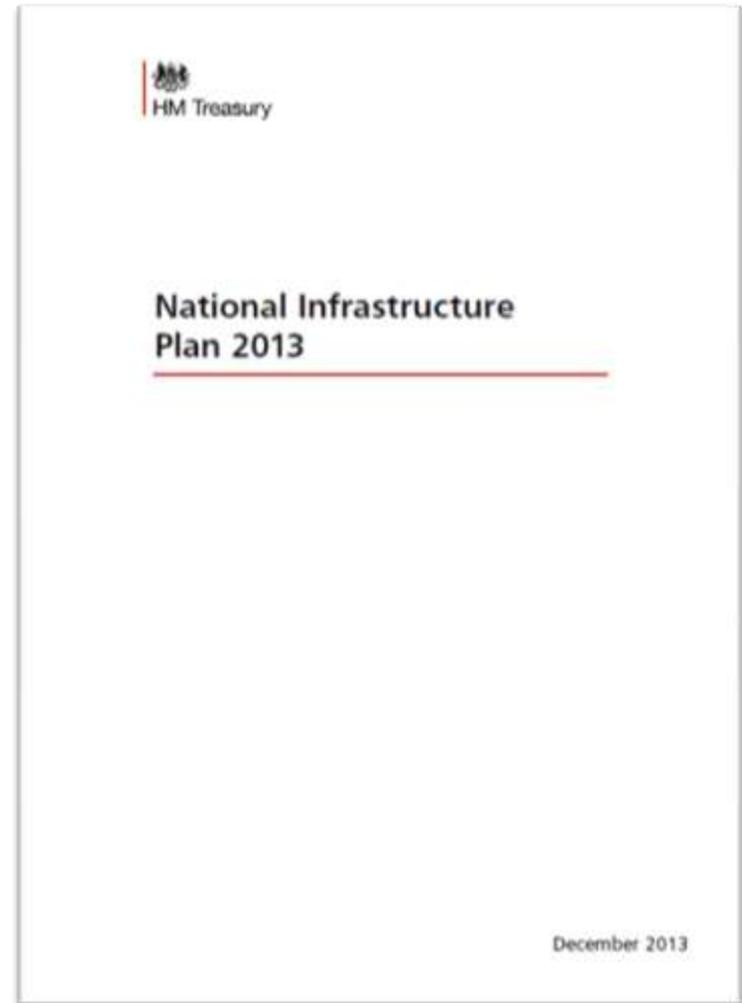
- Infrastructure UK is a unit within the Treasury, that works on the UK's long-term infrastructure priorities and secures private sector investment.

Responsibilities:

- co-ordinating and simplifying the planning and prioritisation of investment in UK infrastructure
- improving UK infrastructure by achieving greater value for money on infrastructure projects

National Infrastructure Plan

- Government vision for UK infrastructure
- Strategic need for investment
- Pipeline and priority investments
- Delivery progress
- Funding and financing infrastructure investment



UK commitment to long-term spending (SR13)

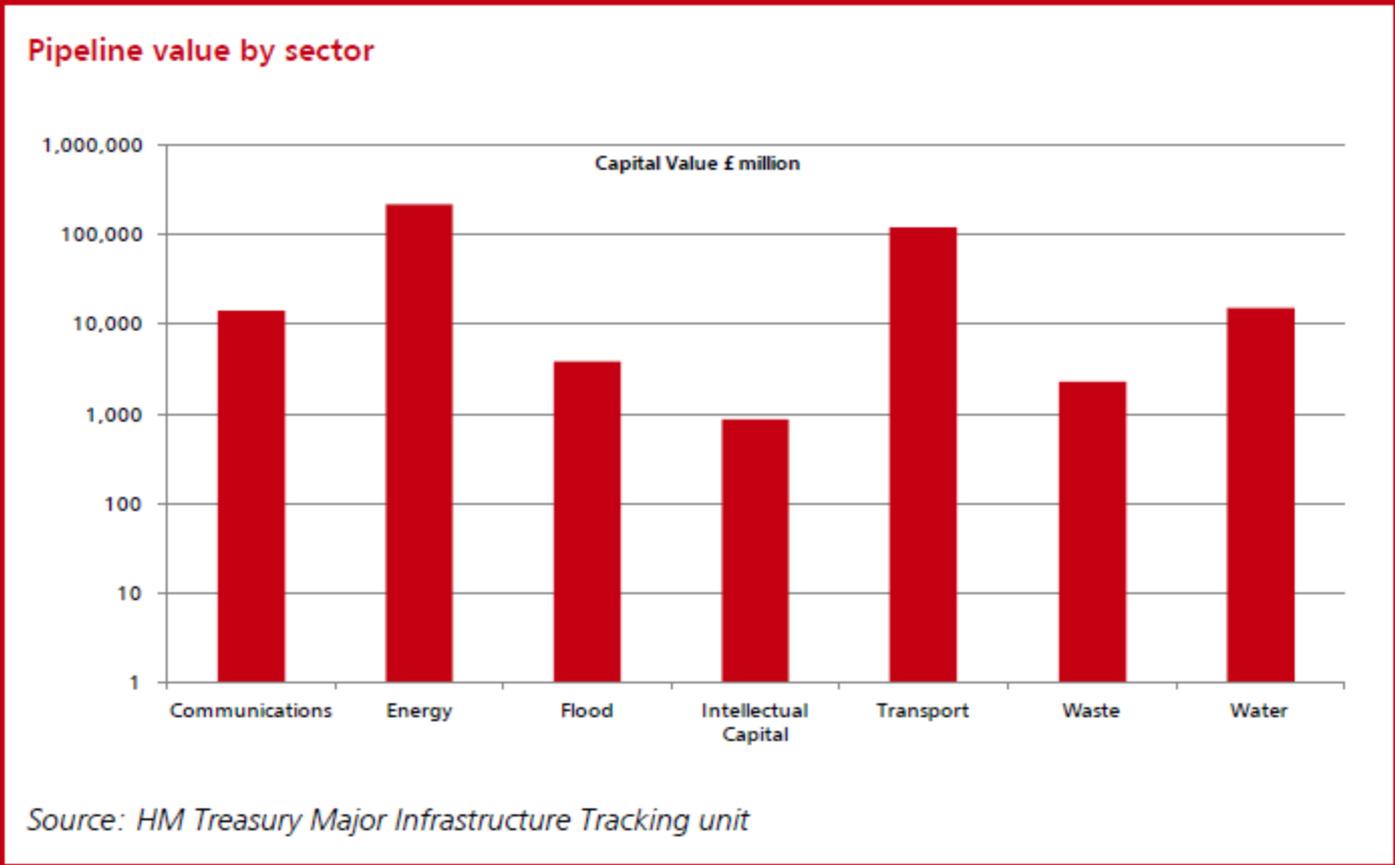


Budget 2014

- £150 million funding for flood defence and £200 million pothole fund
- Freezing the Carbon Price Support rate at £18 in 2016-17
- Urban Development Corporation for Ebbsfleet Garden City
- Cambridge Gain Share
- Approval of £270 million UK Guarantee for Mersey Gateway
- New Planning Court to fast-track disputes
- Increase the PWLB limit from £70 billion to £95 billion

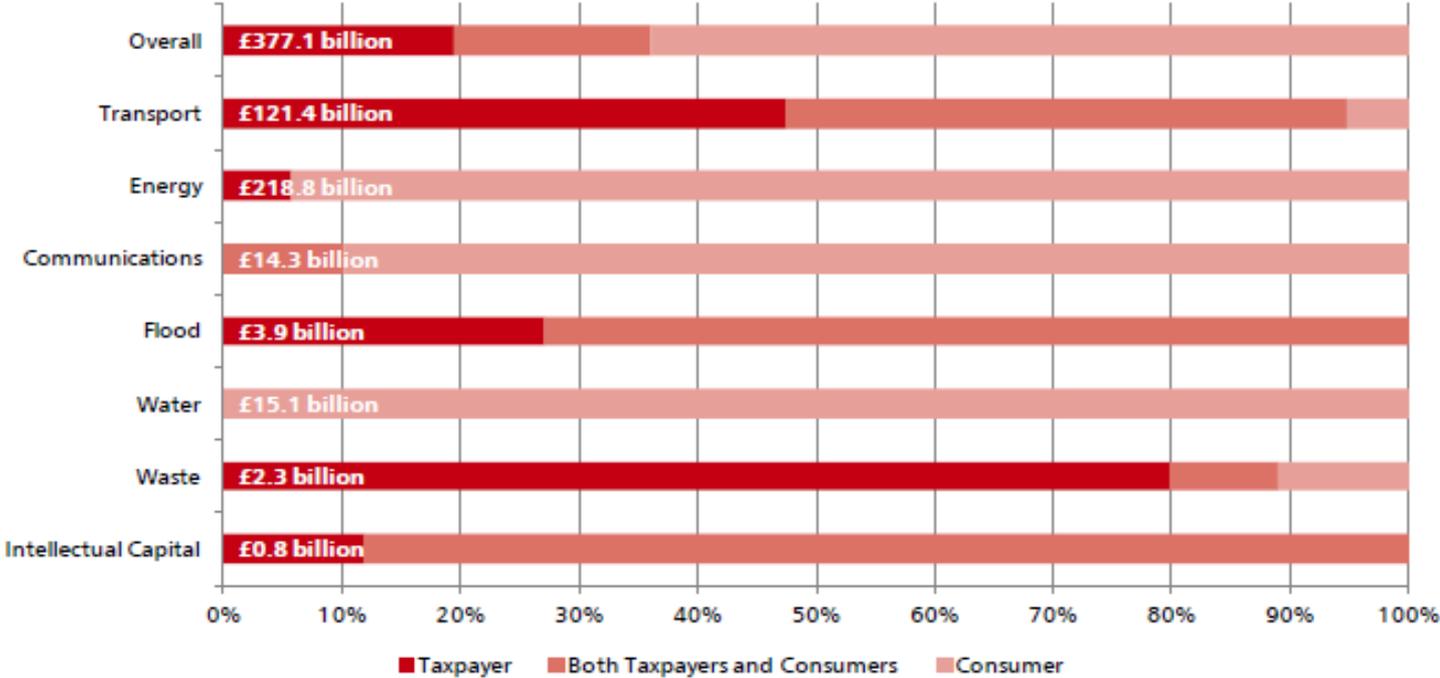


UK infrastructure investment pipeline



Funding infrastructure investment

Chart 6.A: Funding mix for each infrastructure sector



Source: HM Treasury Major Infrastructure Tracking unit

NIP 2010

- First ever national plan, published October 2010, set out hierarchy for investment:
 - 1. Maintenance and smarter use of assets**
 - The priority is to make the best use of the extensive assets that are already in place through maintenance and demand management.
 - 2. Targeted action to tackle network stress points and develop networks**
 - 3. Transformational large scale capital projects**
- Requires effective asset management strategies across the networks

Improving delivery – 2010 Cost Review



Infrastructure Cost Review 2010:

- UK civils costs consistently in upper quartile
- Potential savings of up to 15% identified (£2 billion to £3 billion annually)

Key implementation plan objectives:

- Pipeline visibility and certainty
- Long term funding and planning
- Grouping projects into programmes
- Competition/procurement models
- Risk management and use of OB
- Engineering standards
- Infrastructure data/benchmarking
- Effective asset management

...need to change client and industry behaviours

Infrastructure Cost Review outputs

July 2012

- Evidence of clients getting smarter at simplifying their requirements
- Ongoing work in clients to remove unnecessary standards and focus on outcomes



April 2012

- Industry, clients and government producing a co-ordinated approach
- Work now progressing on other sectors and skills



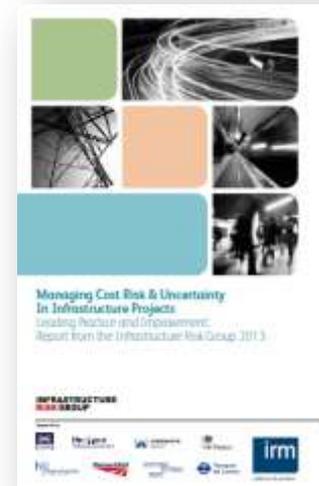
July 2012

- Implementation Group chaired by Richard Coackley
- Recommendations adopted in regulatory approach for AMP6



Nov 2013

- Guidance on improved approaches to managing risk
- Linked to supplementary Green Book guidance
- Legacy “expert risk group”



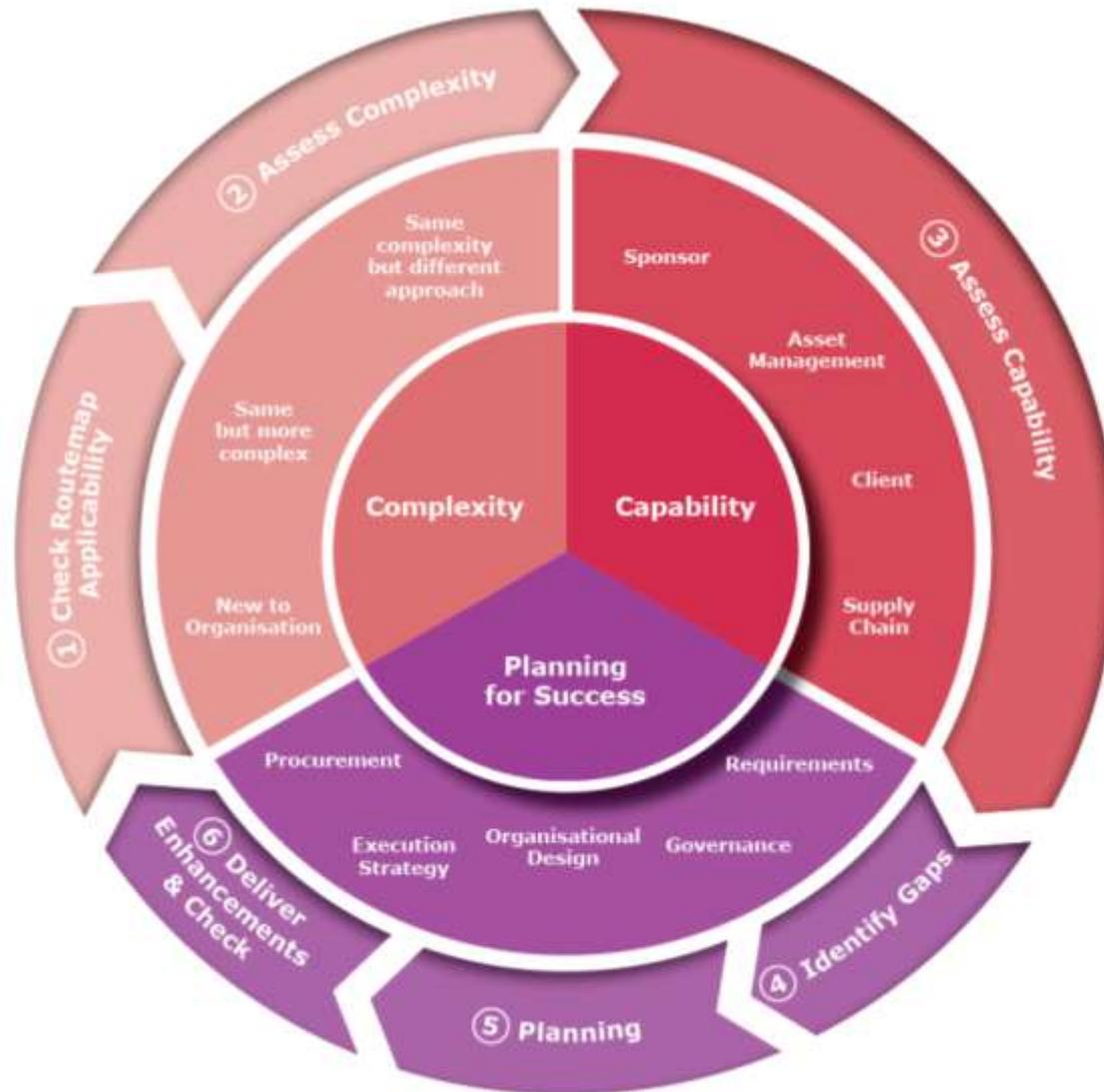
Infrastructure Carbon as a driver of cost reduction

- Published November 2013
- Concludes reducing carbon can drive reduced whole life cost
- Sets out actions to reduce carbon from construction and operation of UK infrastructure assets
- Target 24 MTCO₂e / year by 2050
- Industry leaders from government, clients and supply chain signed pledge to work to deliver recommendations
- Key to consider at project outset to drive the right behaviours



Infrastructure Routemap Overview

Draft



Pipeline and skills

- Strategic context for infrastructure investment set out in NIP, backed by £375bn pipeline
- Challenge: how best to use this to understand:
 - Overall skills demand
 - Pinch points on capacity & capability – either in regions or for particular skills – across sectors
 - To give infrastructure industry the confidence to invest strategically for the market, not just tactically for a project
 - In skills and capability
 - In tools and products
 - In goods and services
 - that can improve delivery, build resilience, futureproof & maximise whole life value of infrastructure assets



Future challenges

- **WHAT?**
- Recognising increased levels of investment in economic infrastructure and demands for value for money:
 - What should asset owners do to ensure they specify *appropriate* futureproofed assets?
 - Role for industry / academia to shape thinking
 - Defining whole life value of an asset (cf WLC)
 - Value can include socio-economic benefits
 - Noting costs may accrue to asset owner, benefits to asset user
 - Providing evidence base for repair vs replace, proactive vs reactive
 - Common approaches for both green and brownfield assets?



Future challenges

- **HOW?**
- Developing and delivering best practice
 - Infrastructure is a system / network – how best to bring system thinking into asset management strategies
 - Do we need standard assets or asset standards?
- Innovation
 - Doing the same thing - properly
 - Doing the same thing – differently
 - Doing a different thing
 - How should industry / academia engage to help develop solutions?
 - What new skills are required to deliver better infrastructure? And how best to develop these?

