



HM Government
Construction



Digital Built Britain

UK and Indonesia

Global Infrastructure Prosperity Fund Programme

Building Information Modelling

Adam Matthews

October 2017



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Current Context

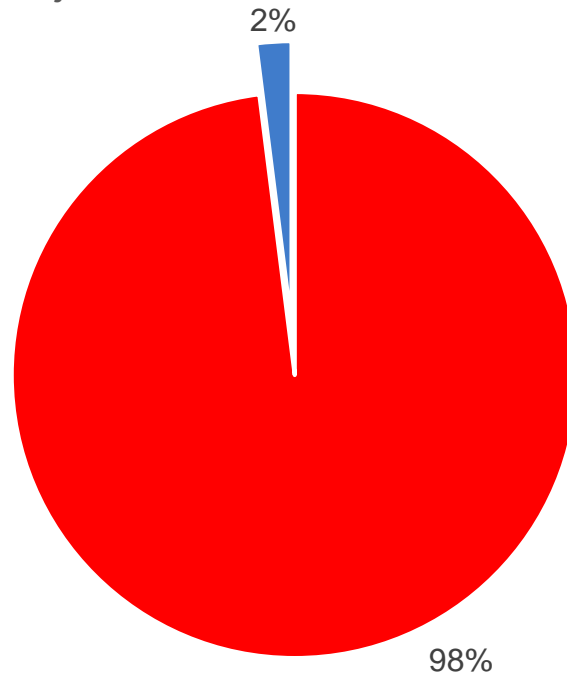
Global Trends
Infrastructure Challenges



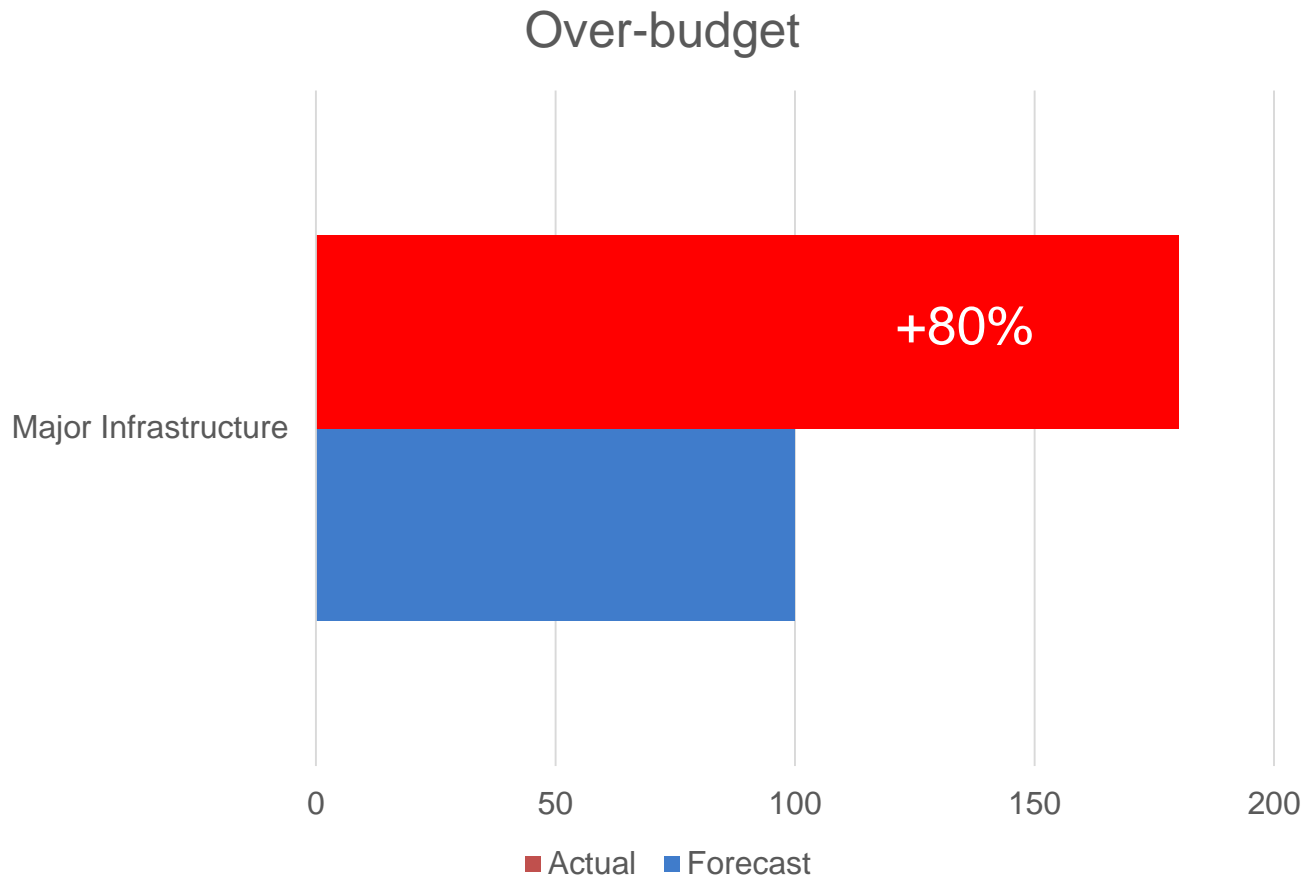




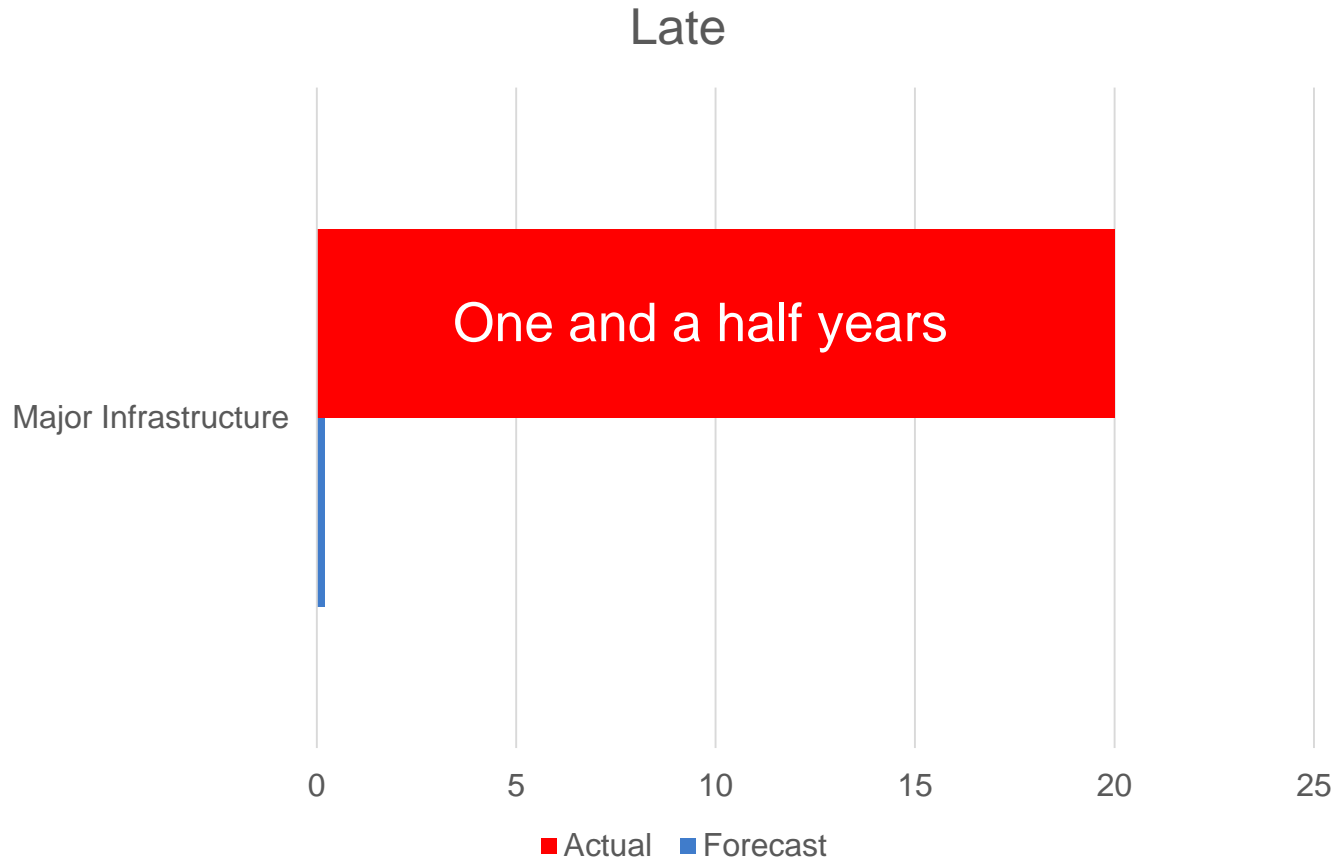
Infrastructure Projects



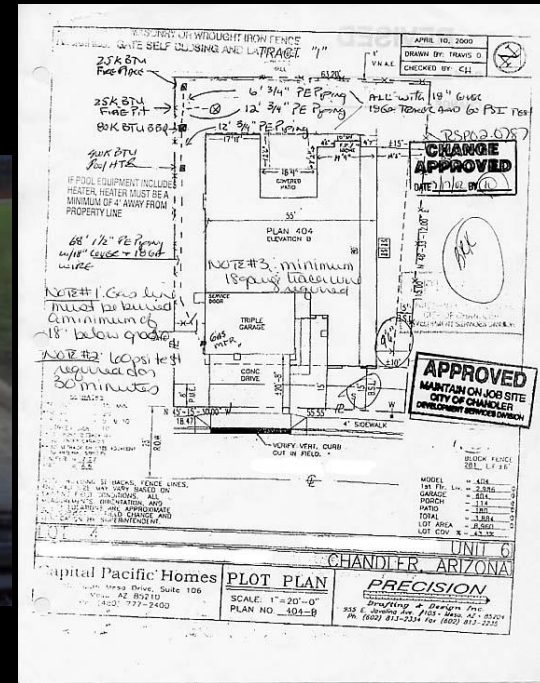
<http://www.mckinsey.com/industries/capital-projects-and-infrastructure/our-insights/the-construction-productivity-imperative>



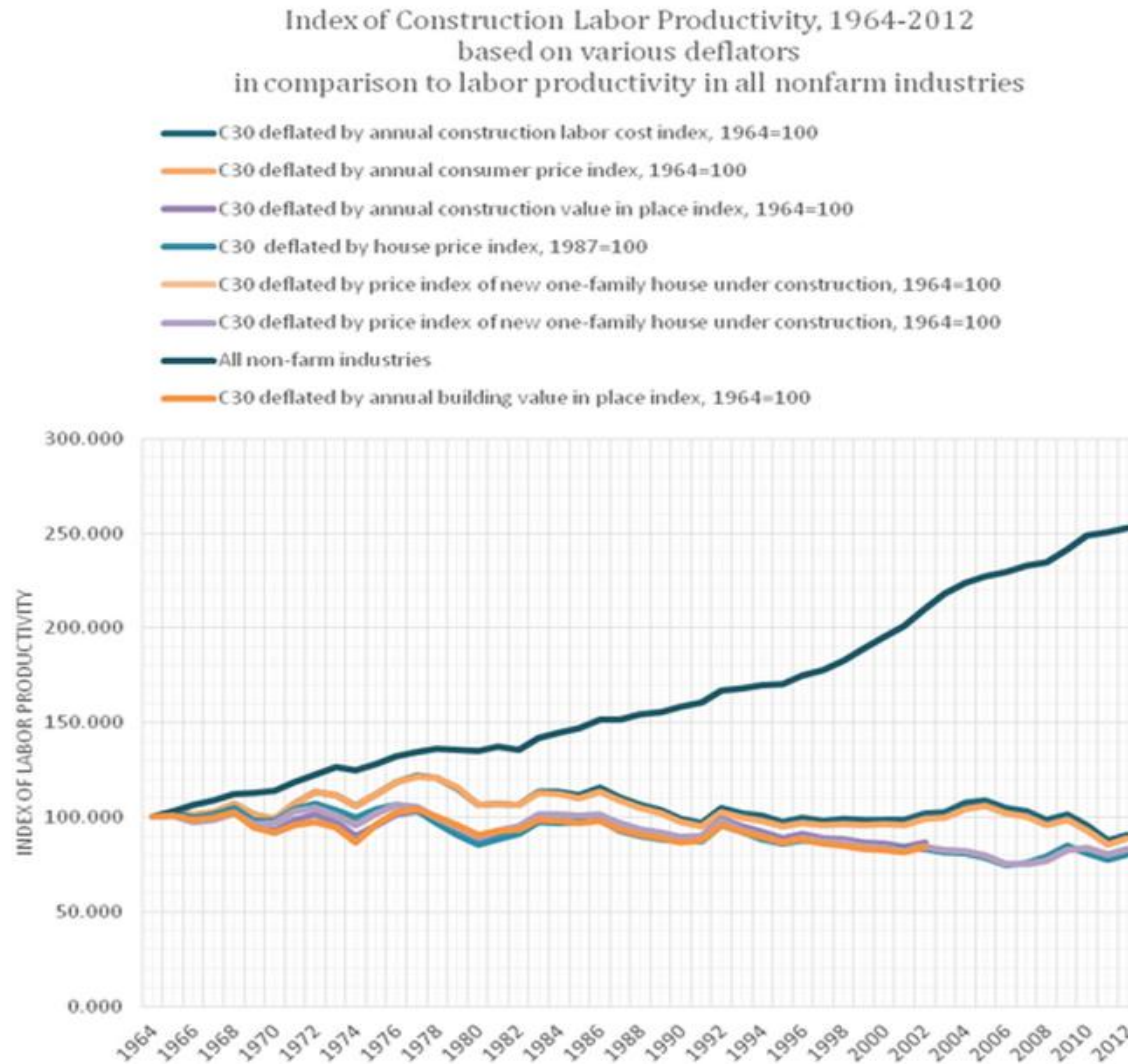
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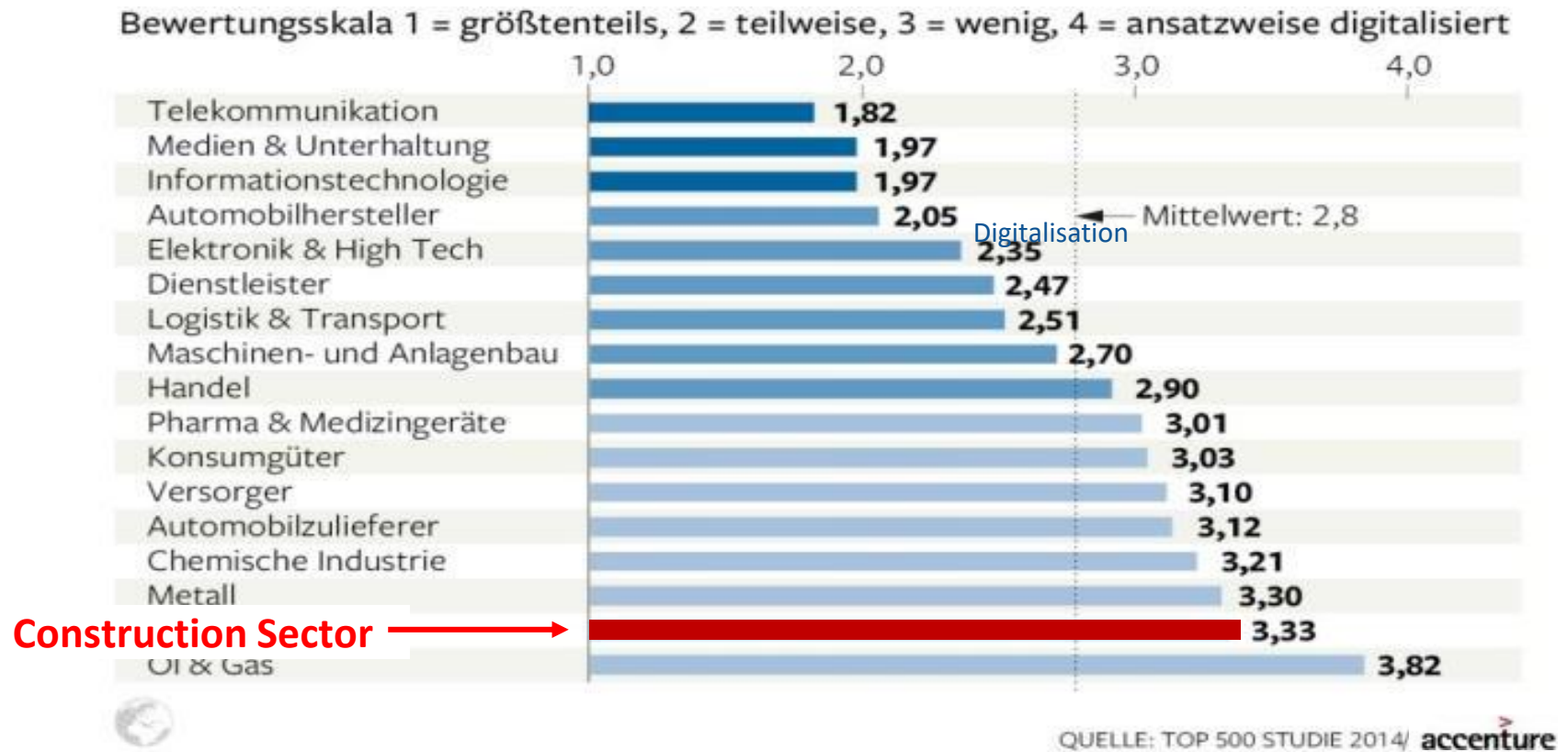


Declining productivity



Fuente: J.R. Fuentes, G. García, Revista Economía Chilena, Abril 2014, vol 17 n° 1

Low adoption of technology



Causes of low productivity

Traditional ways of working...



Project process - fragmented
Paper based - errors

Cost of low productivity

35%

Wasted cost in the sector

Managing our public assets



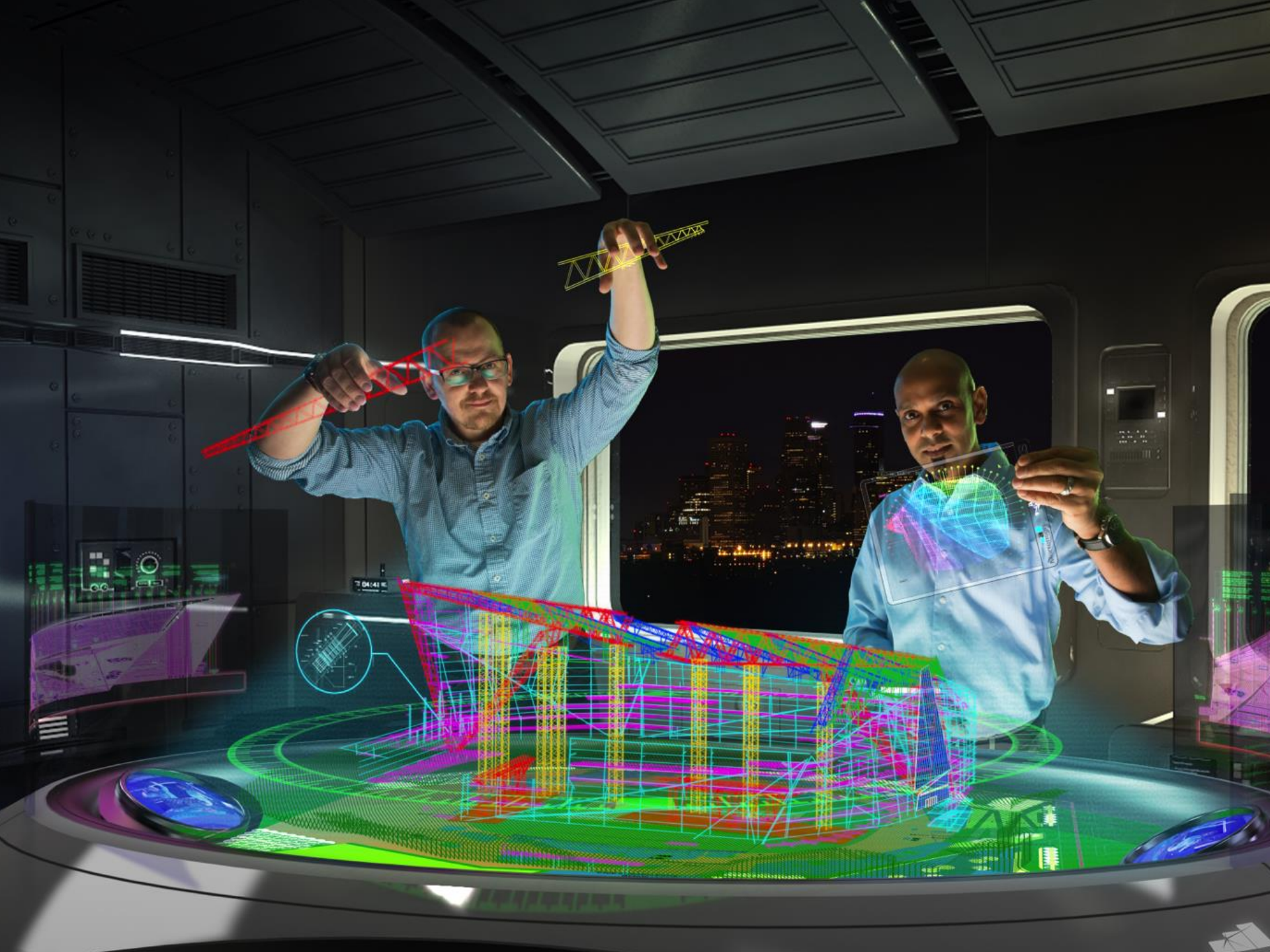


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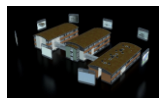
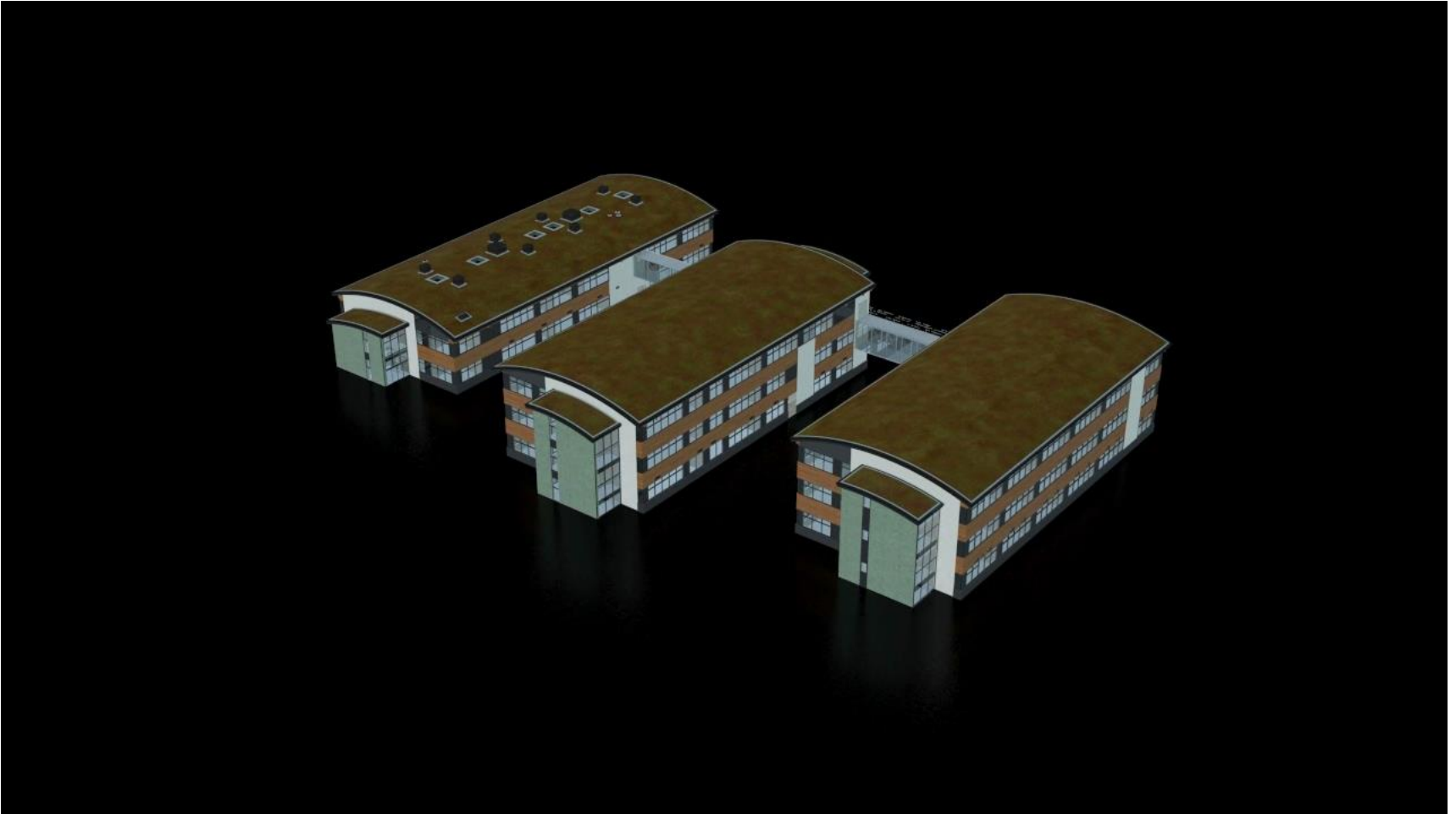


Digital Built Britain

What is BIM?



What is BIM?



**By 2025, “full-scale digitalization...
will lead to annual global cost savings
of 13% to 21% in the design, engineering
and construction phases and 10%
to 17% in the operations phase”**

BCG (The Boston Consulting Group)

'Digital in Engineering and Construction:
The Transformative Power of Building
Information Modeling' 2016



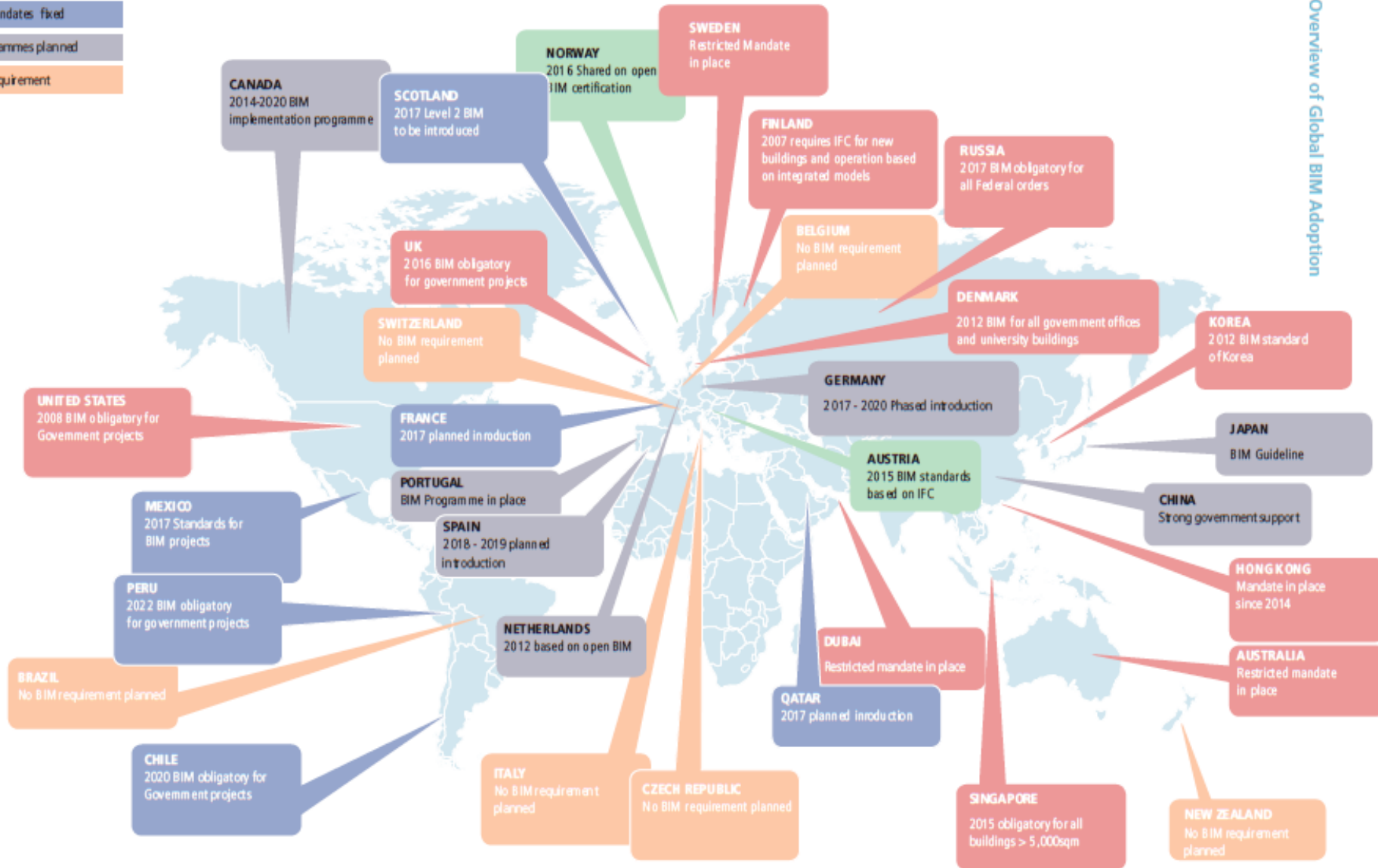
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What are Governments doing?

Figure 1: Overview of Global BIM Adoption



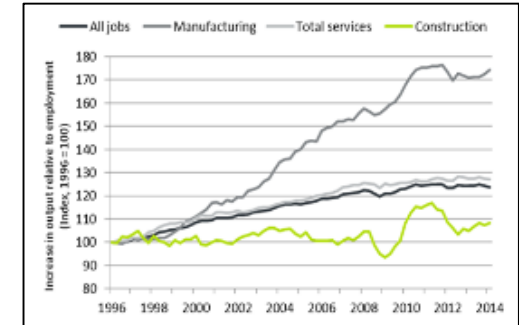
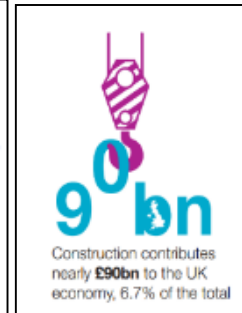
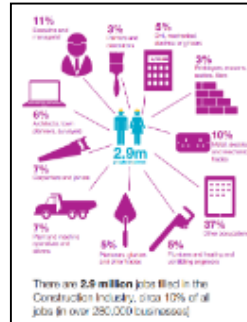
National BIM Programme: UK Example



Department for
Business, Energy
& Industrial Strategy

Objectives:

15% savings: More for same
Productivity & competitiveness
Better Client Outcomes



"This Government's four year strategy for BIM implementation will change the dynamics and behaviours of the construction supply chain, unlocking new, more efficient and collaborative ways of working. This whole sector adoption of BIM will put us at the vanguard of a new digital construction era and position the UK to become the world leaders in BIM."

Francis Maude
Minister for the Cabinet Office



National BIM Programme: UK Example

Government commitment 5 year target: 2016 BIM Mandate

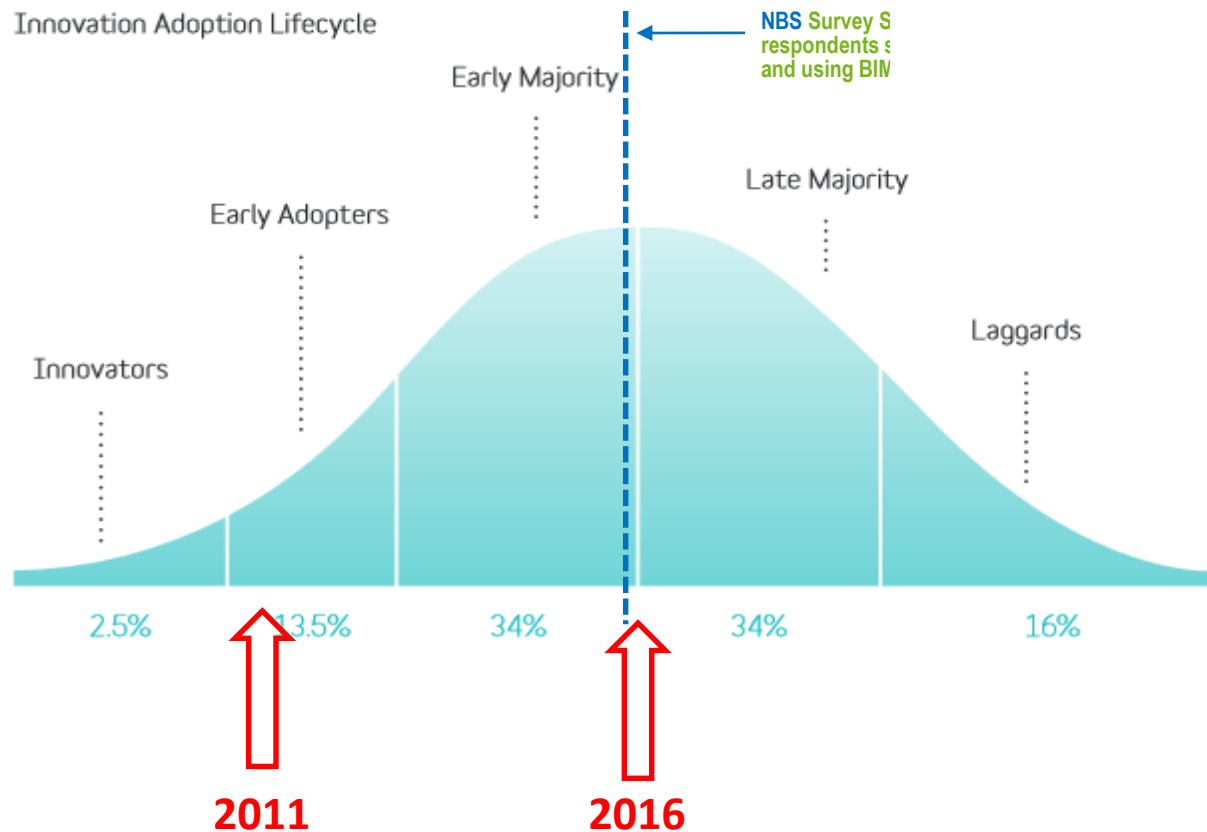
Engage industry - COMMUNICATION & COMMUNITIES

Develop standards and tools – COMMON UNDERSTANDING

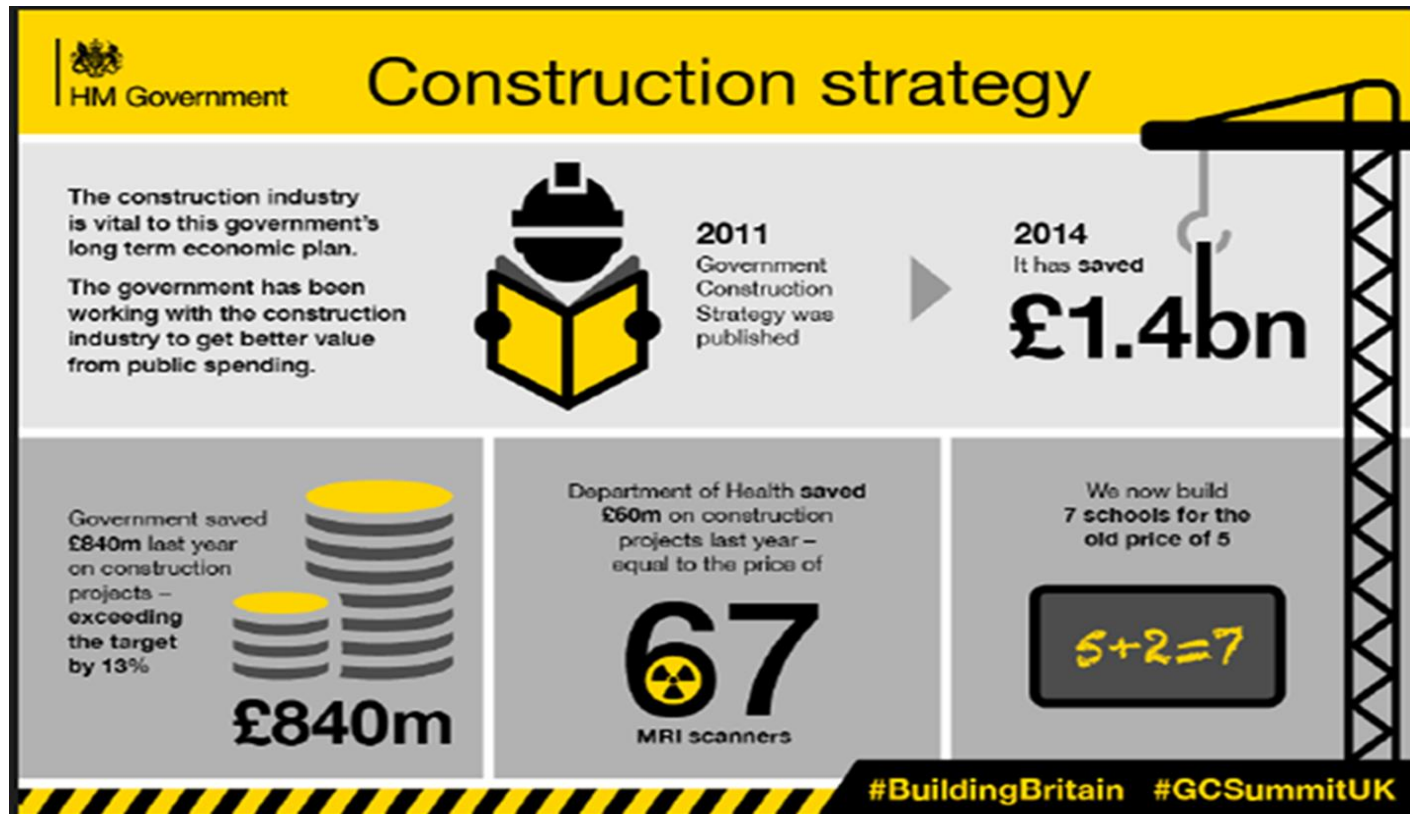
Use public spending – CLIENTS ASK FOR DIGITAL INFORMATION

Build capacity of public client and industry, SLOWLY!

4 year industry transformation program



4 year industry transformation program



10%

2011-2015
£3bn



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Why Do Governments Care About BIM?



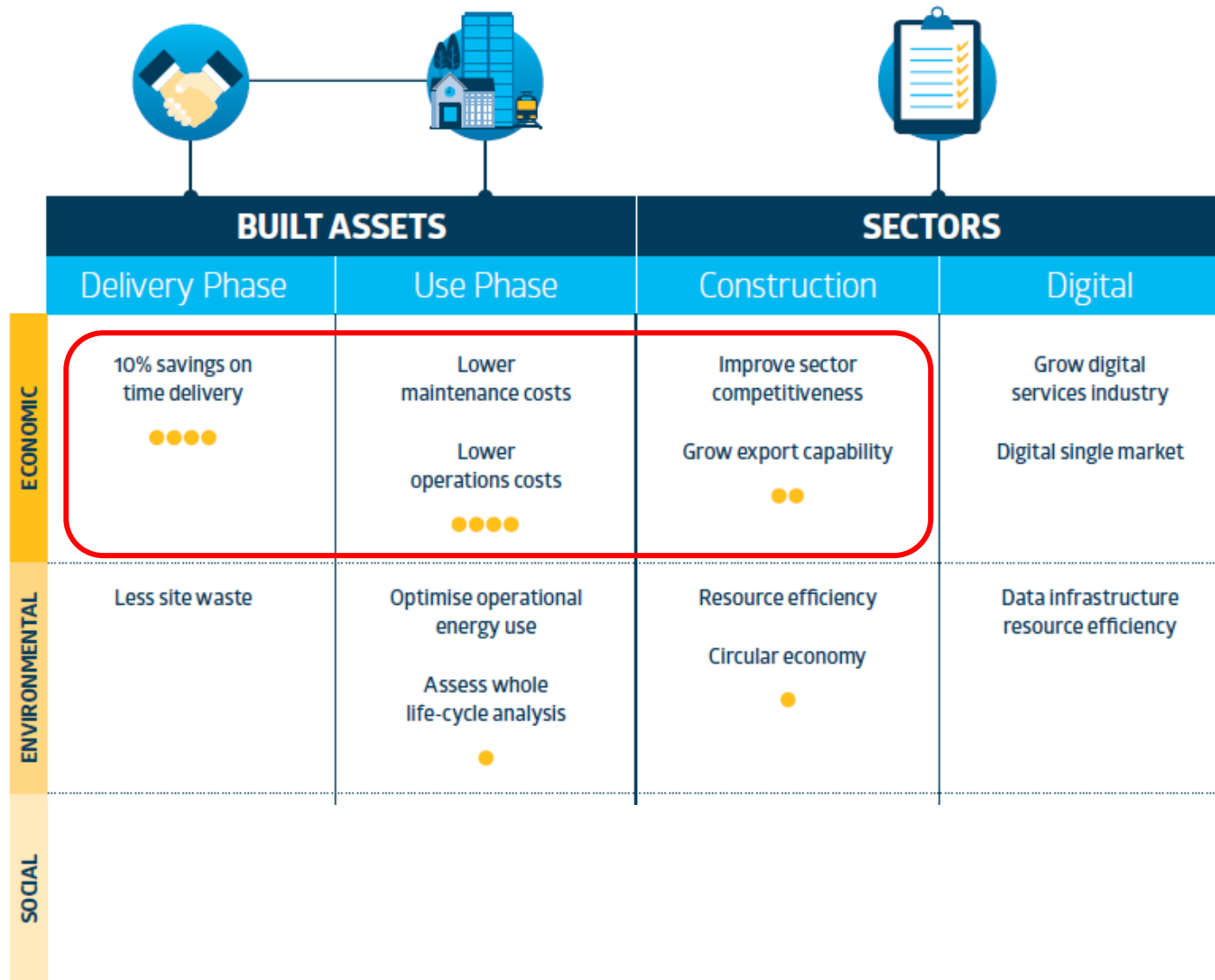
<http://www.eubim.eu/handbook>



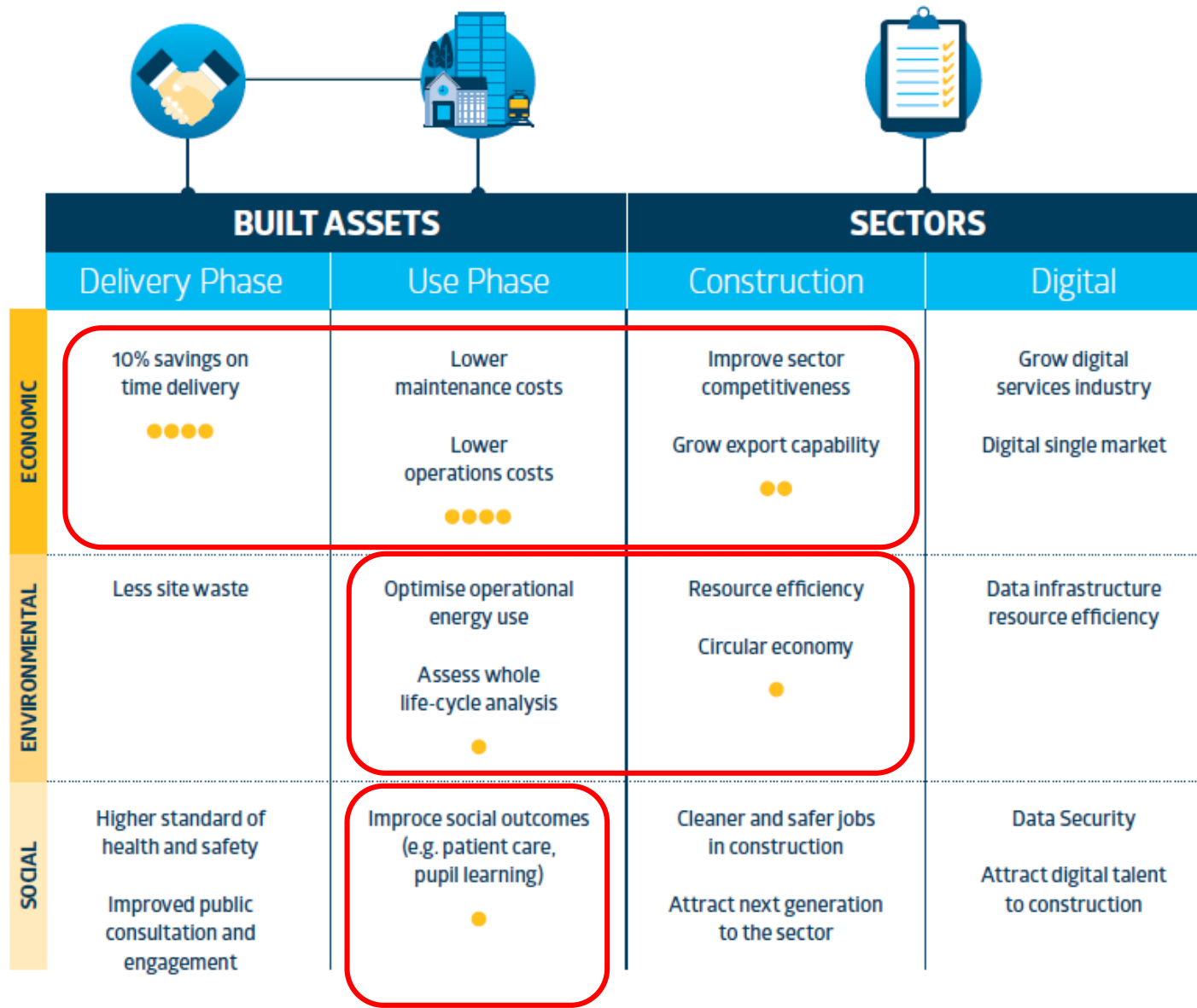
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Why provide public leadership?

The government ultimately pays

Better value for public money:

Get more for the same

Public spending as a driver for improvement, innovation

The client with influence

Network effect of adoption: support for SMEs - Growth

Digital skills, increasing global competitiveness



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Our Offer

Prosperity Fund

Global Infrastructure Programme

**Sustainable and resilient infrastructure –
a critical enabler for economic development.**

A cross Whitehall Programme to be delivered by the FCO,
BEIS and the Infrastructure and Projects Authority.

International Technical Assistance Programme

European Union

Public Procurement Directive

10 >> 23 nations

Grow market alignment



Latin America

MoU with Brazil, Chile, Mexico (2017)

(Working under GIP – Colombia, Brazil)

Developing a LatAm Regional Hub



Middle East

DIT in Abu Dhabi

FCO/DIT/BEIS/HMT-IPA

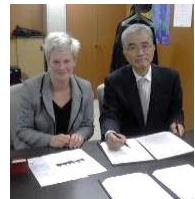
BIM integration with UK Global

Infrastructure Programme (GIP)

Asia

Japan MoU: 2017/18

Indonesia, Vietnam – Prosperity



Austria

Belgium

Croatia

Czech Republic

Germany

Denmark

Estonia

Spain

Finland

France

Ireland

Iceland

Italy

Luxembourg

Lithuania

Netherlands

Norway

Poland

Portugal

Slovakia

Slovenia

Sweden

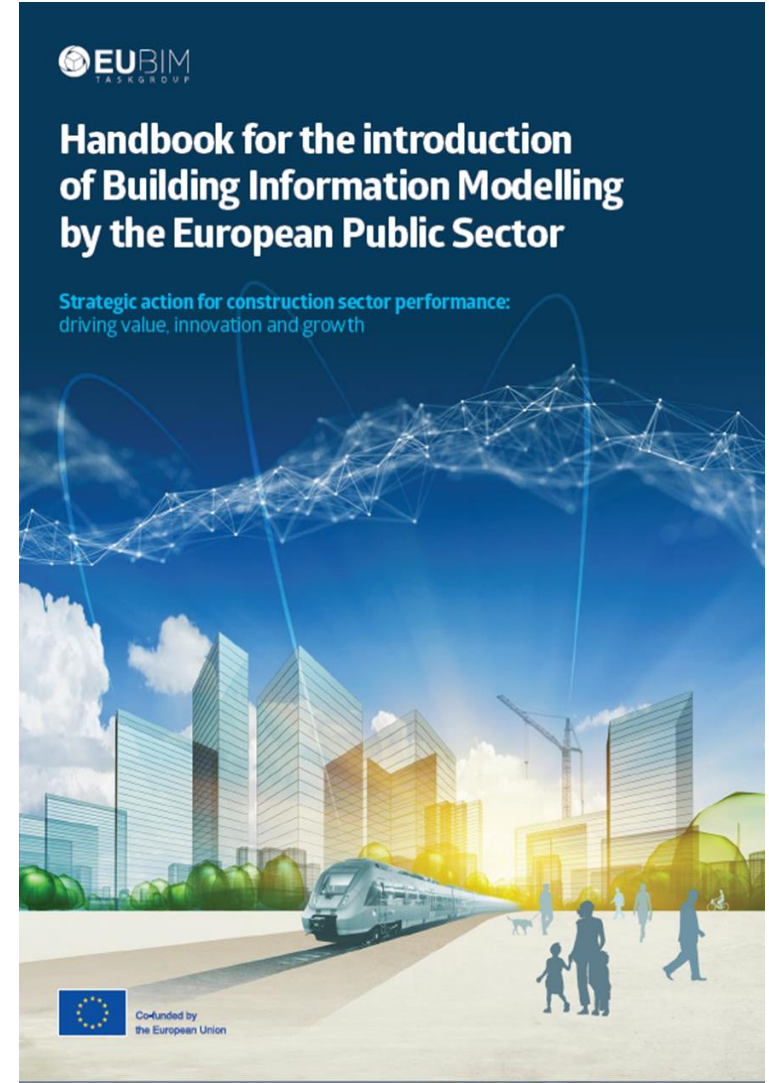
UK



Collaboration and Alignment

- 20+ nations
- 15+ languages
- Different legal structures
- Public clients, policy makers
- Infrastructure and buildings

www.eubim.eu/handbook



Strategic framework for public sector national BIM programmes



Level 2 BIM: International

PAS1192:2 Capital Delivery

PAS1192:3 Operational Delivery

BS1192:4 Data Structure

Data Classification

Digital Plan of Works (Levels of Data Detail)

PAS1192:5 Security

BIM Contract Protocol

Government Soft Landings



Chilean Government: BIM



MOU SIGNING UK BIM TASK GROUP – CORFO – MOP, MAY 2016



Practical Example: Chilean Government

- UK Support for development of Chilean BIM strategy
 - Assistance for the national implementation plan
 - Chilean cross-ministry agreement
 - Chilean delegation visits to UK and UK team to Chile
 - UK technical assistance programme
-
- “3 years in 1.”



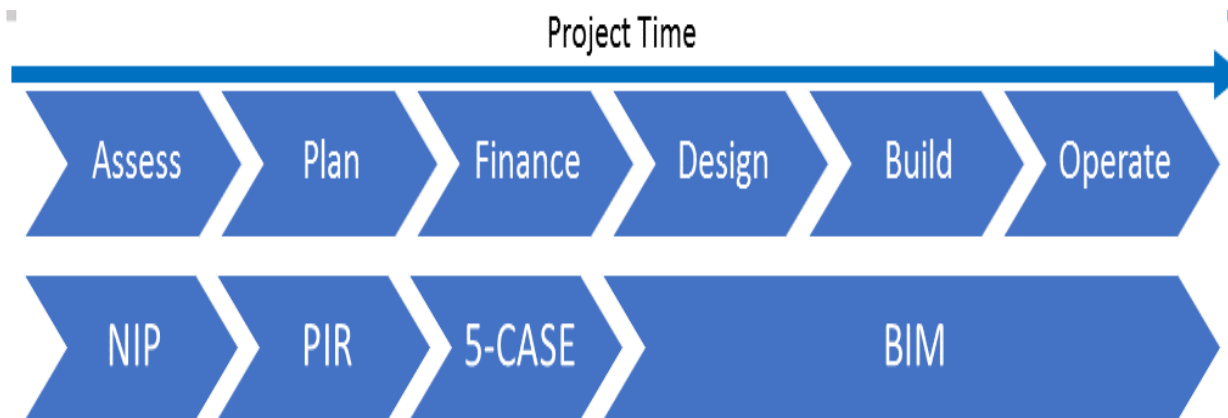
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Practical Next Steps

How does BIM relate to 5 case & Route map



Practical Steps: Indonesia

Explore the opportunity: Indonesian National BIM Programme

Identify key stakeholders: potential ownership

Support for existing policy objectives:

Economic, environmental and social

Who should the UK team work with?



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