



Infrastructure
and Projects
Authority

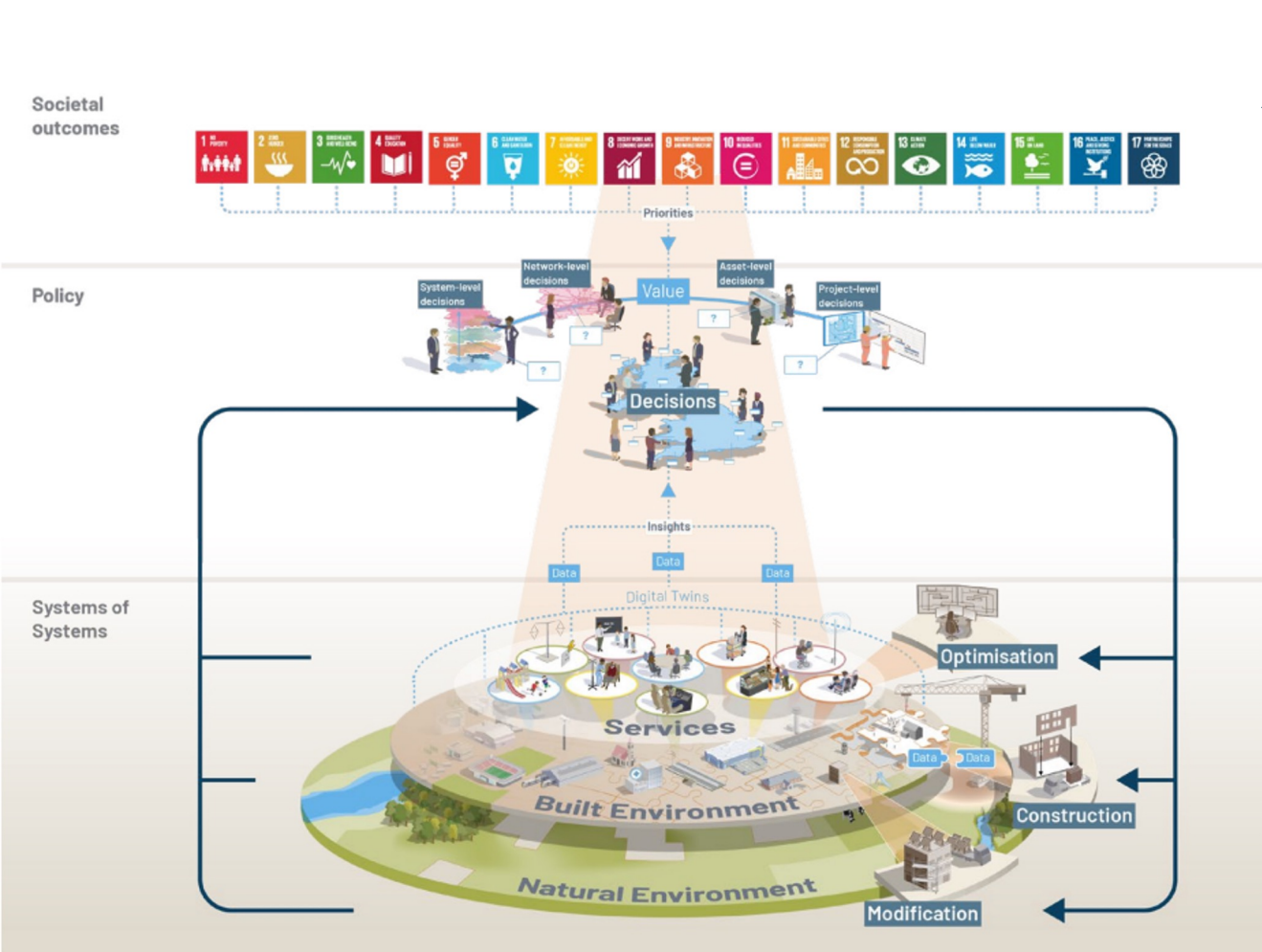
Transforming Infrastructure Performance

TIP LIVE 2023

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TIP: Building readiness for the future



2030 World Class Delivery Defined: All projects are optimising and prioritising positive benefits and outcomes for **people and planet** maximising value for money without compromising on safety.

2025 TIP BAU: Enhancing project outcomes. Benefits of **digitalisation, MMC, standardisation of metrics and contracts, and psychological safety** will be recognised and actively used in projects across government.

2023 Driving change: Establishing **TIP maturity baseline**, evaluating real world **benefits** of all that encapsulates **TIP**. Becoming a **joined up intelligent client**.

TIP BAU 2025

value-led, data-driven project delivery

Data & insight

All our delivery and operations will be optimised using **technology, data analytics, and AI**

Business & delivery models

Implementation of **Construction Playbook** and increased use of **MMC** where suitable and best value

Market capacity & productivity

Comprehensive pipeline to provide industry with **confidence to invest in skills and innovation**

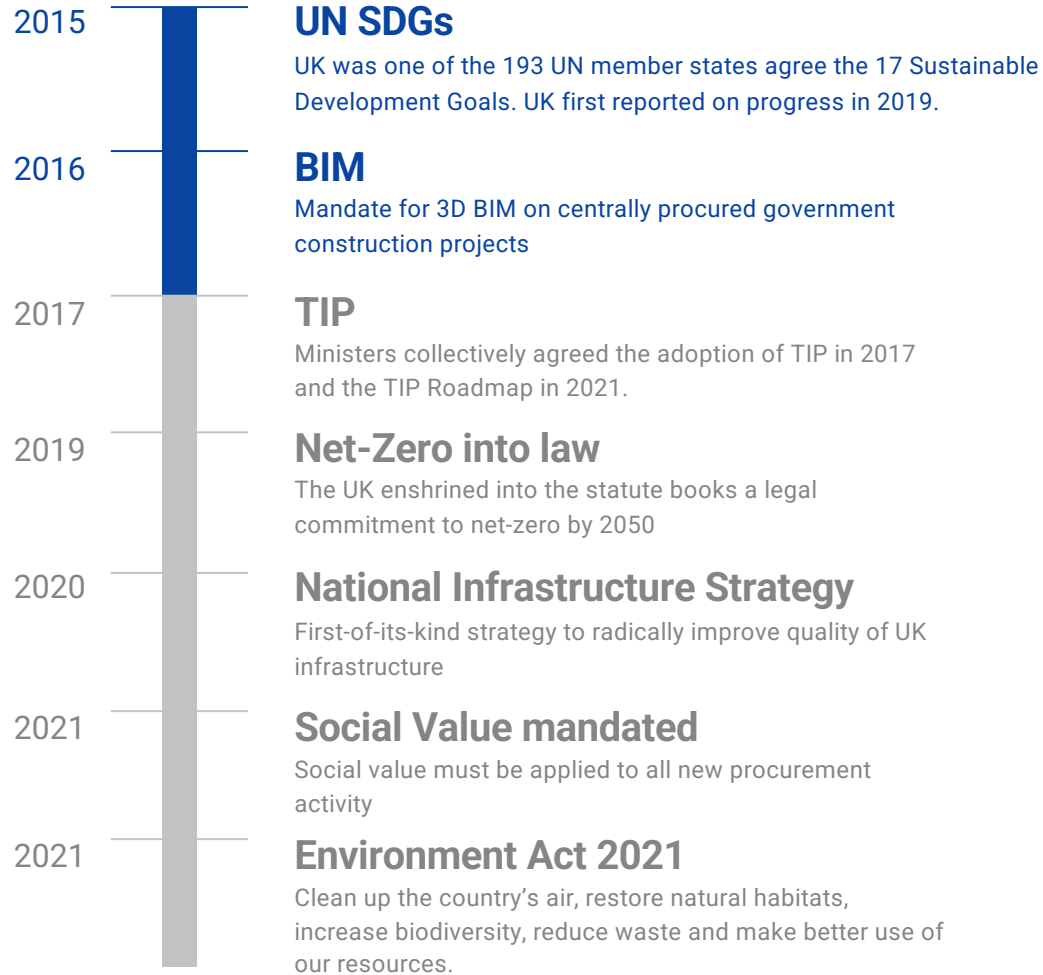
Environment & sustainability

Sustainability and carbon reduction embedded in delivery processes and rooted in outcomes

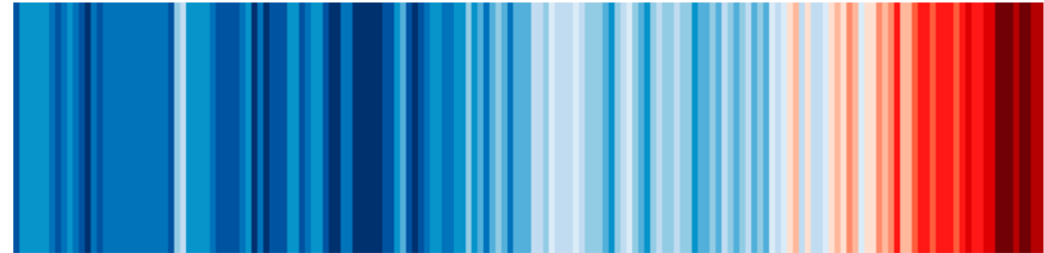
Expertise & Capability

Apprenticeships and upskilling on project data analytics, psychological safety and other key areas across PD profession

Urgency to drive TIP principles forward

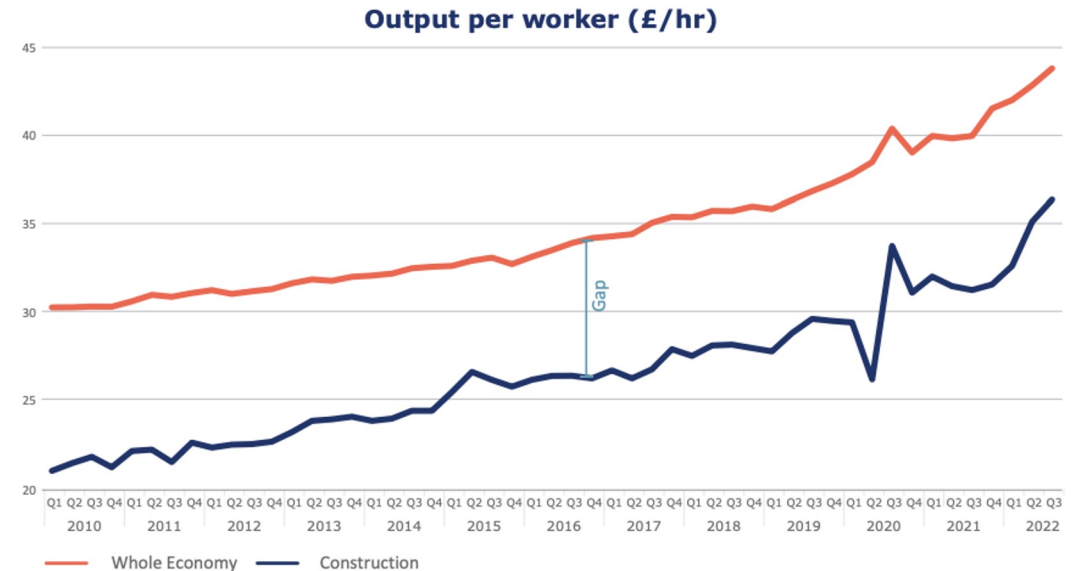


Impacts of climate change are amplifying



Global temperature change (1850 - 2022)

Productivity lags behind the rest of UK economy

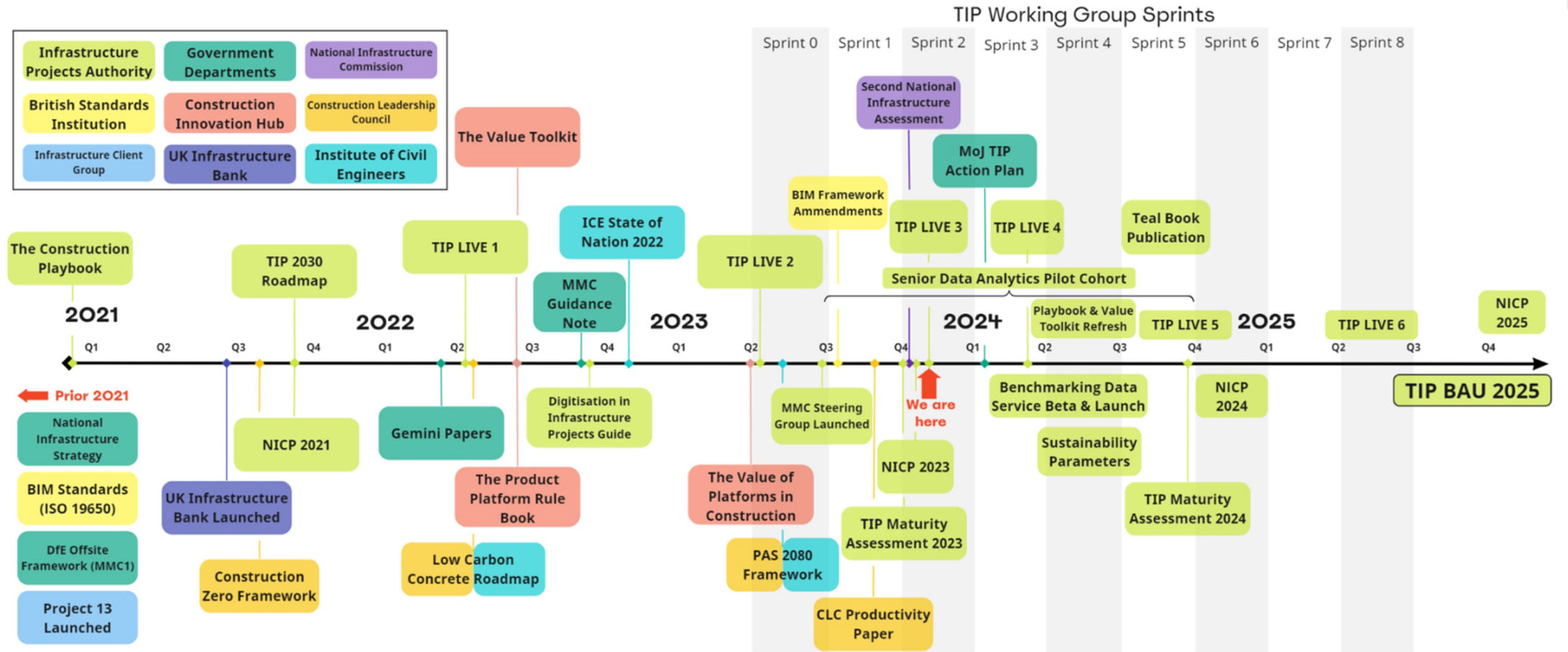


Progress to BAU 2025

Since embarking on our mission to be TIP BAU 2025, we have made significant progress by:

- **Strengthening cross-government collaboration**, through establishing action-driven groups across the TIP themes - therefore becoming a more intelligent client.
- **Recognising that data and digitalisation is the future** and investing in the technology, practices and skills to make this a reality.
- Establishing **processes** such as an annual cross-government maturity assessment to **quantify and measure progress against each of the TIP principles, holding government accountable.**

We are well on our way to TIP BAU 2025, but there is much to do - and time is running out!



Successes of AI, BIM, and other initiatives...

Component Tracking – HMP Millsike

MoJ are using a system that tracks all stages in real time, capturing supply-chain progress and decisions instantaneously as components move through design, manufacture and construction on site:

- Reducing cost through efficiencies
- Reducing risk through programme certainty
- Improving visibility, sense-making & identification of issues for better management, and time savings



Generative AI – HS2 London Tunnels

SCS JV are using the ALICE Technologies platform, which leverages the power of **generative AI** to allow the optimisation of labour, equipment and material to solve the projects most complex constraints. ALICE was used to optimise the build time for the construction of the Euston shaft by **86** working days, a significant saving in associated overhead expenses and has **£12m** programme-wide potential savings.



GPA – Transformation by Better Building Information Management (B2IM)

GPA are adopting a common language and approach by using single asset taxonomy, data hierarchy, and data standards by:

- **Delivery Model:** Mandating B2IM policy and ‘standardised information requirements’ into GPA’s contracts
- **Building Capability:** Embedding and upskilling the B2IM practical delivery and assurance capability through structured training



Video played here

BAU in practice

Lower Thames Crossing - The greenest road

National Highways is designing the Lower Thames Crossing to be the UK's greenest road by:

- Making carbon reduction their **organisational purpose**
- Set low carbon limits in **contracts** - already lead to a 50% carbon reduction compared to 2020 baseline
- Buying the largest volume of **hydrogen** ever for a UK transport scheme
- Committed to sustainability beyond carbon - investing in green skills, net gain of **1 million trees**, brand new **community woodland**

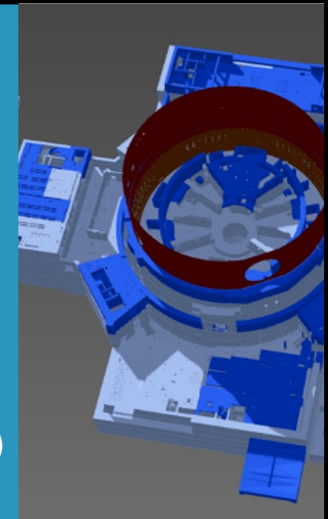


Hinkley Point C – 4D planning

HPC is using **4D planning** by taking the 3D model of the plant and using the milestone plan, and the activities, equipment and skills needed, building a highly complex construction sequence.

The HPC project benefits of 4D include:

- **Reduce rework** and associated **schedule delays** (and cost increases) due to incorrect installations
- **Raising and tracking** of day-to-day issues, which can be surfaced through the tool in the 4D schedule reviews. This is already providing **real value** to the project during April 2023 trials
- Utilisation of user reports and 4D timelines for Plan of the Week
- Easier co-ordination of access and sequencing between **different parties**
- **Installation tracking**



Key takeaways

We are already seeing TIP embedded across major projects, leveraging cutting edge **technology**, **cutting carbon**, and **building skills** across government ...
While increasing **productivity**, **getting more value**, and **growing the economy**.

To be **TIP BAU**, we need to **urgently** build on these successes - sharing best practice, engaging with each other, and driving positive change. This is what **TIP LIVE** today is all about.

TIP BAU 2025

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