



GREEN CITIES, INFRASTRUCTURE AND ENERGY PROGRAMME (GCIEP)

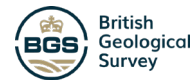
How world-class UK agencies and methodologies can transform the UK's development impact

Implemented between 2023 and 2026, the £70 million FCDO-funded Green Cities Infrastructure and Energy Programme (GCIEP) was a demand-driven initiative focused on sustainable green cities and climate-resilient infrastructure in lower-income countries. As the flagship programme of the UK's Centre of Expertise for Green Cities, Infrastructure and Energy, GCIEP has supported the UK Government's mission to accelerate investment in, and delivery of, infrastructure and urban development that is responsible, reliable, inclusive, low-carbon and climate-resilient. Among many other results, the programme has contributed to more than 33 adopted policy or regulatory changes and mobilised £988 million in infrastructure financing.

Key to this success was the UK Expertise Offer (UKEO) component of GCIEP which facilitated the deployment of world-class UK government expertise alongside the GCIEP Alliance's private sector capability to deliver transformative impact for cities around the world. GCIEP has provided a blue-print for how this expertise and partnership-model can enhance the UK's international development offer and impact, while also positioning the UK as a world leader and partner of choice for infrastructure internationally.

Through GCIEP and the UKEO, the UK is pioneering a new approach to technical assistance by combining three powerful elements:

- Eight UK public Delivery Partners with proven experience and cutting-edge capabilities.
- The GCIEP Alliance, consisting of PwC, Mott MacDonald, Adam Smith International, Engineers Against Poverty and MDY Legal.
- Application of world-leading UK infrastructure toolkits and methodologies.



The UK Delivery Partners who bring their expertise to the UKEO are: British Geological Survey (BGS), British Standards Institute (BSI), Crossrail International (CI), Connected Places Catapult (CPC), National Infrastructure and Service Transformation Authority (NISTA), Ofgem, Ordnance Survey (OS) and Transport for London (TfL).

With this combination of diverse expertise, GCIEP has been able to drive transformative change in sustainable and inclusive infrastructure development internationally, in three ways.

First, it combines UK Delivery Partners' unique expertise, experience and credibility – having already achieved more sustainable and inclusive infrastructure change in the UK and internationally – with world-leading private sector technical assistance capability through the GCIEP Alliance, combining technical and development capability and a global presence.

Second, GCIEP has identified, showcased and deployed internationally a portfolio of UK-proven and cutting-edge toolkits and methodologies that can help partner countries improve and accelerate planning, decision-making, project design, procurement and implementation, while also levelling the playing field for UK companies overseas. Some of these are featured in Figure 1.

Third, GCIEP provided a unique platform for government-to-government agreements. Part of a 'one-UK' offer, this brings together the best of UK government and private sector capability to support partner countries, including leveraging the best of the UK's supply chain.

These elements are demonstrated through the following case studies in Vietnam, Ukraine, and Jordan.

Vietnam: Creating the enabling environment to unlock transit-oriented development (TOD) and urban rail investment

In Vietnam, GCIEP made strong progress in moving Vietnam's TOD agenda from concept to implementation. The results, which exceeded expectations, were made possible by co-delivery between the GCIEP alliance, Crossrail International (CI) and Transport for London (TfL) and local experts with technical expertise and institutional knowledge and influence.

This world-class team supported the development and review of a range of TOD-related resolutions and policy frameworks in Vietnam's two largest cities, Hanoi and Ho Chi Minh City (HCMC). It also provided recommendations and capacity building to strengthen Hanoi MRB's ability to establish and operationalise a dedicated TOD Office, supporting more coherent

coordination and decision-making across relevant stakeholders. The programme delivered key technical outputs including a TOD diagnostic, land value capture (LVC) financing mechanisms, and a TOD strategic framework. In addition, CI has led the UK support to the Government of Vietnam in establishing a Centre of Expertise for BIM in Vietnam's Rail sector (See Box 1).

Across both cities, GCIEP delivered capacity-building workshops strengthening technical capacity across key agencies and advanced an integrated delivery model with UK partners including CI, TfL and CoST. In addition, using non-ODA budget, GCIEP facilitated outward and inward missions connecting UK and Vietnam rail sectors, further strengthening G2G and B2G engagement in line with the recently signed Comprehensive Strategic Partnership between the UK and Vietnam.

Together, these milestones have strengthened the policy and institutional foundations for TOD delivery in Hanoi and HCMC, as the cities implement ambitious urban rail development, unlocking possibilities for other development finance partners and investors. GCIEP's support is an important contributing factor to unlocking a forecast US\$84 billion in downstream investment in TOD projects, as forecast by the Government of Vietnam.¹

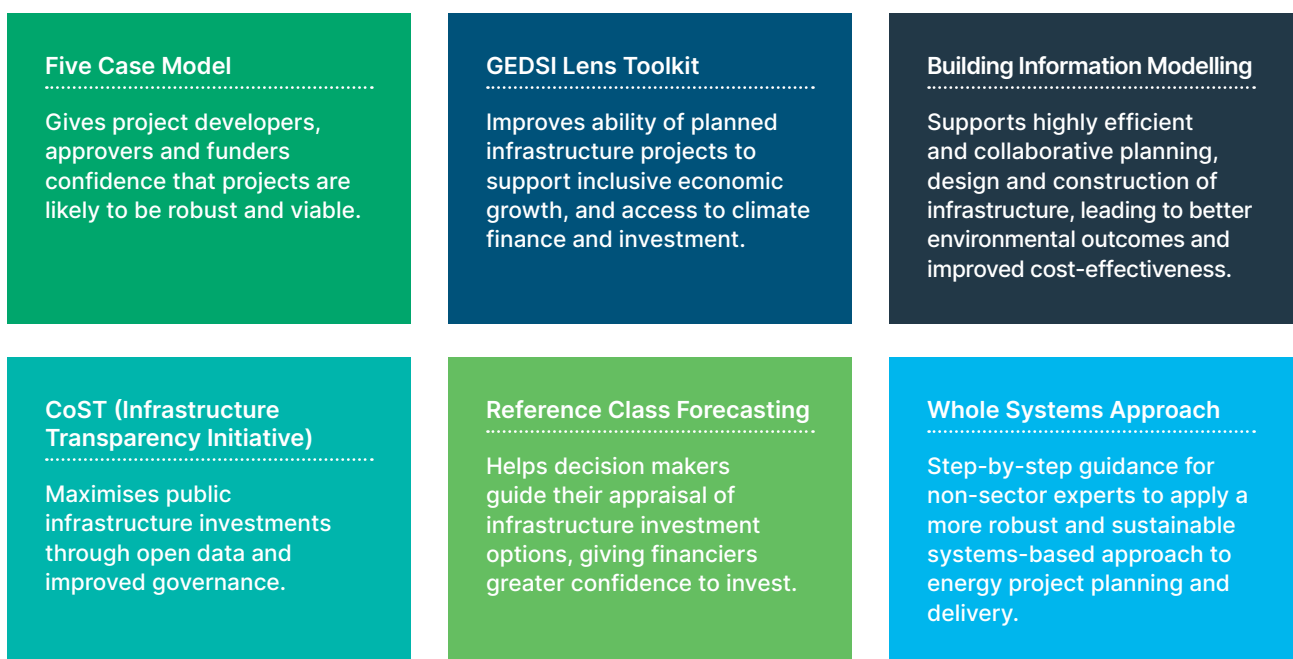


Figure 1. Some of the UK methodologies deployed through GCIEP

¹ TBC

Box 1: Centre of Expertise for Rail Digital Transformation in Vietnam

GCIEP's technical assistance, led by Crossrail International, played a significant role in establishing the Vietnam National Centre of Expertise (CoE) for Rail Digital Transformation. An MoU on cooperation to establish a Centre of Expertise (CoE) BIM in railway projects in Vietnam was signed between the UK Government and the Vietnamese Institute of Construction Economics under the Ministry of Construction (MoC) in January 2026 and the CoE was officially launched in April 2026 by the British Ambassador to Vietnam. This initiative supports the UK Prime Minister's G20 rail announcement and reflects the strength of the UK Vietnam strategic partnership. CI engaged extensively with key rail stakeholders across government, industry and academia. These meetings introduced and promoted the concept of the CoE, helped assess current capability in Vietnam and supported early stakeholder involvement in the Centre.

Key drivers of success:

- **Vietnam-based team with deep expertise, local networks and institutional knowledge:** This would not be possible through UK-based expertise alone and it allowed CI and TfL to focus their capability building on the specific needs and institutional context in Vietnam.
- **Responsiveness and adaptability:** GCIEP's 'one-UK' team was able to move at pace and pivot to meet the evolving needs of needs of counterpart agencies such as the Hanoi Metropolitan Rail Board (MRB).
- **Integration of CoST's proven approach and international reputation:** This provided focused and timely support on transparent procurement in the rail sector.
- **Building on previous work and relationships:** Previous FCDO-funded programmes had supported Vietnam with a BIM pathfinder project in 2019 and CI had previously provided initial BIM support a year or two prior to GCIEP.

Ukraine: Strengthening Ukraine's Public Investment Management (PIM) system for infrastructure reconstruction

In Ukraine, GCIEP has drawn on the expertise of NISTA to strengthen Ukraine's Public Investment Management (PIM) system for infrastructure reconstruction.

The Government of Ukraine requested support from the UK, recognising its reputation in infrastructure planning and decision-making, with the UK's 5CM recognised by the G20 as an international standard for business case development. And through the previous FCDO-funded Global Infrastructure Programme, NISTA's international team had produced the international business case guidance, based on the 5CM, and had experience and capacity to provide international support and capacity building. However, demand for support in 5CM quickly outstripped the capacity of NISTA's small team to support and provide much-needed political economy insight to support reform. At the request of the British Embassy in Kyiv and NISTA, GCIEP was able to rapidly mobilise a team of international experts to support NISTA to scale their 5CM training in response to demand and support the adoption of the 5CM into law.



TOD workshop in HCMC, Vietnam

GCIEP's support has included enabling the Government of Ukraine's adoption of the Five Case Model (5CM) through Cabinet of Ministers Resolution 527 in 2025 and strengthening project preparation through the application of updated PIM methodologies, including development of a business case for the €19 million Truskavets water project, now submitted to the national pipeline. Over 500 officials were trained by GCIEP between April and December 2025 and the programme is now being formally embedded in Ukraine's civil service curriculum.

GCIEP also delivered national and regional Single Project Pipeline (SPP) analyses to assess how PIM reforms are driving improvements in project preparation and pipeline quality. The analysis tracked the SPP's consolidation from over 800 initial concepts to 195 strategically prioritised projects valued at approximately \$298 billion, identifying key constraints – including uneven project readiness, weak financing linkage and gaps in economic appraisal – and providing GoU and international finance institutions with actionable evidence to guide prioritisation and preparation support.

Most recently, GCIEP worked with the Government of Ukraine's DREAM platform team to align its guidance with international best practice, including the use of AI-supported innovation to improve efficiency (See Box 2).

Box 2: Advancing Ukraine's Public Investment Management through AI Innovation

Ukraine faces reconstruction needs of nearly \$588 billion over the next decade. DREAM, the platform through which Ukraine's Public Information Management (PIM) reform is being implemented, is used by over 1,340 municipalities, 15 ministries and 24 regional administrations. It has placed significant demands on users, many of whom had as little as three months to learn new regulatory requirements under wartime conditions, generating methodological support queries peaking at around 850 per day. To help address this challenge, GCIEP collaborated with the DREAM platform and the Ministry of Digital Transformation to develop an AI proof-of-concept tool – a methodological assistant to help PIM and DREAM users navigate early-stage project development requirements, check eligibility and readiness, and access relevant guidance. A future roadmap for full AI integration into DREAM was also developed for the Government of Ukraine.

Key drivers of success:

- **Institutional embedding of a structured methodology:** Successful adoption of 5CM required integrating the methodology into formal regulations and digital systems, ensuring a common analytical language and consistent project documentation.
- **Strengthening institutional capacity:** Effective implementation depended on targeted capacity-building for ministries and decentralised actors, addressing gaps in economic appraisal, financial modelling and delivery planning to ensure consistent, investment ready project preparation across the system.
- **Linking preparation to financing:** Embedding 5CM required early, realistic financial planning and clearer pathways to funding, as many projects had indicative rather than confirmed financing, limiting progression to bankable investments.
- **Integrating appraisal with digital systems:** Alignment of 5CM with DREAM created a unified data environment, improving transparency and comparability. Success depended on deepening data quality, analytical depth and consistent use of platform-aligned guidance.



5CM training, Ukraine, September 2025

Jordan: Using Reference Class Forecasting to enhance risk management for the National Conveyance Project

In Jordan, GCIEP has established and is delivering a dedicated Risk Management Facility (RMF) for the flagship ~US\$6 billion National Conveyance Project (NCP). The NCP is a complex megaproject with high levels of risk exposure, as it will desalinate water from the Red Sea and transport the increased water supply across Jordan.

GCIEP incorporated a clearly articulated UK expertise offer through application of Oxford Global Projects' Reference Class Forecasting (RCF) methodology. RCF is a statistical method for predicting project outcomes (cost, schedule, and benefits) by looking at the historical performance of similar past projects. Megaprojects traditionally suffer from optimism bias and underestimation of costs. RCF overcomes this by providing analysis

to allow projects to take a more objective "outside view" rather than relying on an optimistic "inside view".

In Jordan, OGP applied a bespoke RCF to support enhanced risk management for the National Conveyance Project, calibrated to the project's scope, delivery model and risk profile, strengthening confidence in funding envelopes and informing decision-making. This included the production of tools, templates and governance processes; all designed to help the government to better understand and manage risks relating to cost, schedule and delivery.

Key drivers of success:

- **Investing in government buy-in:** It was important for GCIEP to counter initial reluctance by government partners to apply the RCF, by investing time in political economy analysis, relationship-building, familiarising the RCF approach with government staff and showing clear evidence the benefits.

- **Established UK track record of the methodology:** The RCF is applied for all transport and other major UK infrastructure projects, which built partner government confidence.
- **OGP's practical megaproject experience:** A database of over 16,000 megaprojects allows OGP to provide reliable and evidence-based forecasts of likely costs and schedule risk assessments.
- **Integrated tool deployment:** Introducing RCF alongside familiar instruments like risk registers and dashboards ensures it complements existing processes rather than appearing as a standalone innovation.
- **Local capability development:** Embedding capacity building through hands on exercises, shared risk understanding and clear communication supports long term Jordanian ownership of RCF-based risk management.

Operational learning from GCIEP

Three years of implementing the innovative integration of UK Agency partner expertise into UK aid technical assistance has provided a number of additional lessons for the FCDO and other development partners in operationalising expertise programmes:

- Co delivery between Centre of Expertise (CoE) Delivery Partners and the GCIEP alliance has added clear value in the GCIEP delivery model when embedded early in programme design.
- Governance and accountability arrangements for involving Centre of Expertise Delivery Partners in programme delivery need to be embedded early in programme and work package design, including budgets.
- Lines of communication and coordination processes in co-delivery should be clearly outlined at the start of the programme / intervention.
- Some UK Delivery Partners have limited capacity of to scale up their inputs within or beyond GCIEP. It is important to explore more scalable delivery options, including with a phased approach to apply relevant UKEO methodologies.



GCIEP is a demand-driven initiative focused on sustainable green cities and climate-resilient infrastructure in lower-income countries. As the flagship programme of the UK's Centre of Expertise for Green Cities, Infrastructure and Energy, GCIEP supports the UK Government's mission to accelerate investment in, and delivery of, infrastructure and urban development that is responsible, reliable, inclusive, low-carbon and climate-resilient.

A significant proportion of GCIEP's work is carried out in seven priority countries: Ethiopia, Ghana, Indonesia, Philippines, Mozambique, Vietnam and Zambia, where a Deep Offer programme provides long-term, systemic interventions focused on transformative change and infrastructure financing.

To keep up to date with GCIEP's work:

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The UK's Green Cities, Infrastructure and Energy Programme accelerates the delivery of sustainable green cities and climate-resilient infrastructure – tackling climate change and extreme poverty.