



GREEN CITIES, INFRASTRUCTURE AND ENERGY PROGRAMME (GCIEP)

Learning from GCIEP's feasibility study support to partner governments

Feasibility studies have been a core instrument within GCIEP, used to help move priority infrastructure projects towards finance while strengthening policy frameworks and institutional capability in low- and middle-income countries (LMICs). When well-timed, clearly scoped and supported by strong government ownership and financier engagement, feasibility work has supported investment decisions, influenced planning approaches and built partners' ability to act as informed clients. Experience also shows that technically strong studies have not always translated into investment where fiscal space has tightened, political priorities have shifted or institutional arrangements have remained unclear, which has prompted GCIEP teams to refine how and when feasibility support is deployed.

Overall, feasibility studies remain an important part of FCDO's toolkit, provided they are used selectively, with clear expectations, and as part of a broader journey from policy and planning through to finance mobilisation and implementation.

A snapshot of GCIEP's feasibility study support to partner governments

GCIEP has delivered a number of significant feasibility studies across Africa and Asia, including for the proposed east-west corridor of the Surabaya metro in Indonesia, the Baguio City Bulk Water Supply in the Philippines, urban infrastructure projects in Ghana (including Sekondi-Takoradi), and capacity development support enabling GRIDCo, Ghana's electricity transmission company, to undertake or manage its own renewable energy feasibility assessments. These interventions reflect a deliberate effort to support partner governments to develop investment-ready projects that advance inclusive, low-carbon and climate-resilient development, whilst strengthening institutional capacity and aligning with evolving climate and social standards.

The role of feasibility studies in GCI EP delivery

Unlocking finance and investment

Feasibility studies have helped partner governments move from initial project concepts to propositions that are credible for multilateral development banks, development finance institutions and, where appropriate, private investors. Finance mobilisation has been most successful where high-quality technical analysis has been combined with early, structured engagement with financiers and a realistic view of fiscal constraints. In Ghana, feasibility work for Sekondi–Takoradi, Wa water and energy projects has been linked with early discussions with the EU, EIB, Invest International and AfDB, allowing grant components, risk allocation and tariff paths to be tested while studies were still underway.

In Surabaya, the metro feasibility study integrated options such as public–private partnerships, viability gap funding and land value capture, but limited early formal involvement from financiers underlined the need to treat financing as a dedicated workstream rather than an assumed follow-on. Zambia’s GET FiT experience has shown the value of aligning procurement and contractual design with frameworks lenders already know, strengthening investor confidence while still allowing innovation.

Supporting the policy environment

Feasibility studies have operated as practical vehicles for embedding climate, nature and social inclusion priorities into infrastructure planning. Policy influence has been greatest where feasibility work has translated high-level commitments by project developers on climate resilience and inclusion, into tangible design choices and tools that can inform wider planning practice. For example, the Surabaya metro study integrated climate risk screening, adaptation planning and mitigation measures such as modal shift and electrification in line with national climate and development plans. In Sekondi–Takoradi, feasibility work combined conventional road and drainage design with nature-based solutions, including restoration of wetlands and floodplains, supported by collaboration with external technical partners. Co-developed tools such as the Sustainable Urban Mobility Plan Appraisal Framework piloted in Surabaya have provided templates for more systematic assessment of mobility investments at national and sub-national levels, helping to embed policy priorities such as modal shift and flood-resilient infrastructure in project financing decisions.

Delivering development impact

Beyond finance and policy, feasibility studies have helped governments weigh environmental, social and economic

considerations more explicitly when choosing infrastructure options. Development impact has been strongest where studies have enabled long-term, sustainability-focused decisions and have been underpinned by meaningful and inclusive engagement with affected communities. The Baguio City Bulk Water Supply study supported the selection of a long-term, climate-resilient source at Ambuklao Lake after comparing eight alternatives on water security, climate risk and ecosystem impacts over a 30-year horizon.

In Surabaya, early and continuous engagement with community representatives, including organisations of persons with disabilities and women’s groups, informed features such as barrier-free access and improved station interfaces, strengthening project acceptability and contributing to GEDSI ambitions. In the Philippines, feasibility-related work has highlighted the need to engage indigenous communities and comply with ancestral land rights processes from the outset, even where technical designs are minimally disruptive. Integrating climate indicators into feasibility-stage monitoring frameworks, as in Surabaya, has also provided a basis for tracking greenhouse gas impacts and adaptation benefits over time.



Critical success factors and lessons learnt

Evidence from GCIEP points to several interlinked factors that have underpinned effective feasibility support. Feasibility studies have been most successful when they are commissioned at the right moment, scoped around clear questions, structured explicitly around finance needs and designed to build governments' role as confident clients of project preparation:

- Positioning has mattered as work that built on earlier engagement and was commissioned where there was clear government demand and a realistic prospect of downstream financing has delivered far greater value than studies initiated late in programme cycles or under excessively tight timelines.
- Defining realistic scope and purpose has also proven critical, with terms of reference anchored in specific questions about the problem, options, climate and social integration, financier requirements and intended use in negotiations producing more usable outputs than generic deliverable lists.
- Capacity building has been strongest where feasibility work has helped institutions understand project lifecycles, decision points and standards, as in GRIDCo's mentored pre-feasibility work and Development Bank Ghana's Green Climate Fund accreditation journey.
- Integrating financing considerations and early, non-binding engagement with MDBs and DFIs has helped align technical design with investor

expectations while preserving space for independent financial judgement.

- Examples from STMA, Surabaya and Baguio show that using climate projections, testing nature-based options, applying recognised climate risk methodologies and conducting inclusive stakeholder engagement have led to designs that are more resilient, inclusive and aligned with climate commitments.
- Adaptive management and clear governance, including agreed roles and formal change control, have supported delivery under shifting political and institutional conditions.

Conditions for effective feasibility study support

GCIEP's experience also reveals external and institutional conditions that influence whether feasibility studies are used as intended. Technically strong studies have struggled to gain traction where institutional alignment, political commitment, fiscal space or engagement with key decision-makers and financiers has been weak. In Wa, a sound feasibility study and early financier interest have not yet translated into investment because limited borrowing headroom and IMF-related constraints have led government to favour other schemes on its borrowing list. Surabaya's metro work has illustrated the risks of unclear institutional arrangements and optimistic timelines, with the absence of a formal memorandum of understanding, leadership changes and an initial six-month delivery assumption contributing to delays, scope changes and uncertainty about ownership.

Looking across interventions, realistic assessment of conditions before commissioning, combined with risk mitigation measures such as early formalisation of institutional arrangements, alignment with planning and budget calendars, identification of government champions and explicit planning for dissemination and next steps, has emerged as a key determinant of whether feasibility work informs decisions and attracts finance.

Conclusion

Taken together, the findings confirm that feasibility studies have played a central and multifaceted role in GCIEP's efforts to mobilise finance and support inclusive, low-carbon and climate-resilient infrastructure. Future feasibility support will add most value when it is deployed selectively, aligned with country-led priorities, structured around both technical and financing needs and embedded within longer-term engagement from policy and planning through to transaction advisory and implementation.

How to guidance

Please note that a *Feasibility Study guidance* note has been produced as a second deliverable of this learning deep-dive. This is available here ([link to be added](#)).

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.

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