

# Ghana



**Sectors:** Multi-sector, Energy, Urban

**Cities:** Accra, Sekondi-Takoradi and Wa

**Green Cities, Infrastructure and Energy Programme (GCIEP) capabilities:**

Finance and investment, Institutions and capacity



## The challenge

Ghana's cities face large urban and energy infrastructure challenges, including inadequate housing, water supply and flood management, exacerbated by rapid urbanisation. Informal settlements expand without proper services, increasing vulnerability to climate risks. Energy shortages persist due to overreliance on hydropower, while weak grid infrastructure limits the integration of renewable energy. Financing gaps further constrain efforts to expand resilient urban services and modernise energy systems. Without strategic investment, these issues will hinder sustainable growth, economic development and climate resilience.

## GCIEP's solution

GCIEP plays a crucial role in fostering collaboration, creating innovative solutions and catalysing efforts to strengthen infrastructure and resilience in climate-vulnerable cities. In Ghana, GCIEP aims to improve access to energy by increasing renewable energy generation, as well as improve water security, enhance flood resilience and strengthen urban data systems. This work is being carried out across three strategic interventions.

### 1. Scaling renewable energy in Ghana

GCIEP is collaborating with Ghana as part of the country's transition to a clean energy future by strengthening GRIDCo's (the state-owned electricity transmission company) capacity to integrate variable renewable energy (VRE) sources into the national grid. This includes a five-week capacity building programme to enhance GRIDCo's technical expertise in simulation of grid integration and modelling; a key skill needed to help Ghana meet its target of generating 10% of total electricity from VRE sources.

To lay the foundation for effective VRE integration, GCIEP has delivered specialised training to key public and private sector stakeholders on integrating VRE into Ghana's power grid. Close collaboration with GRIDCo, the Ministry of Energy and Ghana's Energy Commission ensures alignment with national energy priorities.

GCIEP provides in-depth training on feasibility studies for GRIDCo to update and complete studies for renewable energy sites identified by the Volta River Authority

(VRA). The training covers all key components of the feasibility process, including the assessment of renewable energy potential at the site, plant modelling and sizing, grid interconnection analysis, environmental and social impact assessment, financial evaluation, and policy and regulatory review. With this knowledge, GRIDCo can replicate the process for future sites identified in the upcoming strategy. GCIEP works with GRIDCo in quickly assessing and identifying projects to form a comprehensive pipeline of renewable energy initiatives across the country.

GCIEP also assesses the investment needs for grid-connected VRE projects, identifying potential financing sources and recommending policy and regulatory reforms to unlock funding.

### Expected results

Working with Ghana's national utility company, GRIDCo, to help meet the procurement target for 10% generation capacity for solar and wind energy, will improve access to clean energy for communities.

## 2. Building resilient and prosperous cities

GCIEP is strengthening the adaptive capacity of rapidly growing cities, such as Wa and Sekondi-Takoradi, to better cope with climate change risks and vulnerabilities while unlocking investment for green growth and inclusive development. This intervention focuses on improving water security, enhancing mobility and flood resilience, strengthening urban data systems and developing a climate multi-hazard decision support tool for informed resilient planning and investment by city authorities. By developing two feasibility reports to access climate finance and enhance urban data analytics, GCIEP is ensuring informed urban planning and project prioritisation.

GCIEP is working with Ghana Water Limited to develop a feasibility study to mobilise financing for infrastructure that enhances access to water services, particularly for vulnerable communities. This initiative addresses critical water security risks exacerbated by climate change, aligning with stakeholder priorities. Additionally, the study will improve water access for non-domestic uses, such as commercial zones, marketplaces and SMEs, to sustain economic productivity and job creation.

To mitigate climate-induced flooding and enhance economic activities in Sekondi-Takoradi, GCIEP is working with the government to conduct a feasibility study to improve mobility to business hubs, and harbour and drainage infrastructure, including the use of nature-based flood resilience solutions. This will strengthen the city's ability to

safeguard communities and economic corridors prone to flooding. The European Union, European Investment Bank, and Invest International have expressed interest in supporting these measures, highlighting their strategic importance.

GCIEP is enhancing urban service baseline data to track the performance of the draft National Urban Policy and assisting Metropolitan and Municipal Assemblies to develop a short-term climate projection tool that aligns with their medium-term planning cycle. This will enable them to approach their planning process with a climate-smart lens and institutionalise climate responsive urban planning. By expanding the EU-funded Ghana Urban Observatory's capabilities, the intervention is helping to improve evidence-based decision making for investment planning and climate risk assessment.

### Expected results

Helping the governments of Wa and Sekondi-Takoradi to deliver inclusive urban planning, data analysis and project prioritisation, will result in communities that are better able to manage climate change risks and vulnerabilities.

## 3. Mobilising finance for climate-related infrastructure

GCIEP is providing critical technical assistance to accelerate access to finance for climate-related infrastructure through several interlinked pathways under the broader climate finance umbrella. Recognising the immaturity of many projects across a number of key

sectors – energy, urban infrastructure, transport, water/sanitation and solid waste management – GCIEP is focusing on the launch of a project preparation facility to create a robust and financially viable pipeline of investment opportunities to absorb climate-focused funding from both domestic and international capital providers. To demonstrate the need for such a facility, GCIEP is reviewing a long list of projects from line ministries, as well as private sector project sponsors, to identify those with ambitions mutually aligned with Ghanaian priorities and GCIEP's target areas.

In addition to work on the project preparation facility, GCIEP is working with key stakeholders across the country in climate finance, including the Ministry of Finance (MoF), the Development Bank of Ghana (DBG), and the Ghana Infrastructure Investment Facility, to offer capacity-building on relevant topics such as environmental, social and governance (ESG) compliance, incorporation of gender equality, disability and social inclusion (GEDSI) into project design and opportunities to consider carbon accounting in financial decision-making. GCIEP has further supported DBG to progress on their bid for the Green Climate Fund accreditation and has provided an expert embedded resource to MoF to directly assist them in their climate finance ambitions.

### Expected results

Working with the Ministry of Finance and other stakeholders to accelerate climate finance will result in greater investment in low-carbon and resilient infrastructure, driving inclusive economic development.

**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 six priority countries: 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 in Ghana:**

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