



# **Andreas Beavor**

Low-carbon, Resilient and Inclusive Cities and Infrastructure

### Key Expertise

- Low-carbon and resilient cities
- **Nature-based solutions**
- Digital innovation for sustainability
- Circular economy solutions
- Climate finance strategy
- Gender and social inclusion



Hangzhou, China

#### Education

**MSc International Relations** University of Bristol, UK 2006-2007

**BA Geography with European Studies** University of Exeter, UK 2002-2006

#### Languages

English – Fluent French – Advanced

### **Country Experience**

Albania Bangladesh

Indonesia

Lao PDR

Libva

Malaysia

Montserrat

Nepal

Nigeria

Qatar

Rwanda Senegal

South Africa

**Thailand** 

Zambia

## **Profile**

Andreas has 15 years of experience as a consultant and manager in the international development sector and is a co-founder of UrbanEmerge. He provides expertise in linkages between urban resilience and climate adaptation, infrastructure planning including the role of nature-based solutions, low-carbon and resilient buildings, circular economy solutions, gender equality and social inclusion, access to green space and to basic services, the role of digital technologies and climate finance strategy. He is experienced in project scoping, design, management, evaluation and learning and in carrying out research and analysis that leads to a rigorous understanding of how an urban programme or strategy can deliver maximum impact, including via co-benefits. He is experienced in stakeholder engagement and in producing wellwritten guidelines, reports, case studies and learning products. Andreas has worked globally for a range of public, private and civil society sector clients including UN ESCAP, FCDO, GIZ, CDC Group, GSMA, Cities Climate Finance Leadership Alliance (CCFLA), the Asian Development Bank, World Bank, Cities Alliance, the European Commission, Humanity & Inclusion and Global Green Growth Institute. Andreas is based in Hangzhou, China.

## **Employment Record**

05/2022

2017 - present	Co-Founder and Lead Consultant: UrbanEmerge LLP
2015 - 2017	Managing Consultant - Urban Development, ICF
2012 - 2015	Regional Manager: Frameworks and Europe, Central Asia and MENA Region, IMC Worldwide
2010 - 2012	Senior Consultant, IMC Worldwide, UK
2007 - 2010	Consultant, Transport and Infrastructure, Ramboll UK

#### **Selected Consulting Assignments**

08/2022	Team Leader, Assessment of the State of Circular Economy in Qatar, GGGI
_ 12/2022	Leading a team of international and Qatar University experts to undertake a comprehensive assessment of the current state of circular economy policies and initiatives in Qatar, opportunities for circular economy approaches in a range of sectors, including waste management, construction and water resources, and recommendations for the Government of Qatar to accelerate progress across these areas.
06/2022	Team Leader, Research and Guidance for CCFLA PPAG on Strategies to overcome

low creditworthiness barriers in small cities, Climate Policy Institute (CPI) 12/2022 Leading a team to undertake research on barriers to climate finance presented by low

creditworthiness and strategies that can be implemented, including via project preparation support, to overcome such barriers, with a focus on small and medium cities is LMICs. This will be followed by drafting 10 detailed case studies on how selected cities have

overcome barriers, to share learning.

02/2022 Preparation of a Knowledge Product on the role of Digital Solutions in the Context of Rapid Urbanisation in Low- and Middle-Income Countries (LMICs)

Researched and drafted a 25-page Knowledge Product to help Cities Alliance to disseminate guidance and best practice recommendations to city managers in LMICs across Africa, Asia and Latin America on five priority areas where digital solutions can support more sustainable and inclusive urban development in the context of rapid and often unplanned urban growth and mobile populations. These included using insights from



mobile big data, digital solutions to support land tenure and tax revenue, digital solutions to support waste management value chains and e-governance services. Report Link

09/2021 Quality Assurance Lead, Cities and Infrastructure for Growth (CIG) Ghana, Scoping Phase, FCDO

03/2022 Supported the team with strategic inputs and deliverable reviews, to support to two cities (Sekondi-Takoradi and Tamale) in Ghana to address climate change impacts, focused on urban flooding. The team is producing flood modelling analysis, identifying potential hard infrastructure and nature-based solutions interventions and co-benefits on urban heat. and providing guidance on sources of climate finance to turn proposed projects into reality.

02/2022 Team Leader, Pakistan Climate Finance: A Review, UK FCDO / ASI

Conducting a review for the FCDO on Climate Finance Needs in Pakistan and a review 06/2022 of global, regional and national evidence on climate finance that could potentially help British High Commission (BHC) in Islamabad design suitable programmes, support strategic thinking, and engage meaningfully with the Pakistan government on the issue. The review is structured around clearly defining the climate finance sectoral needs in Pakistan, including specific project examples, understanding the barriers to private and public sector climate finance and suggesting how climate finance instruments and approaches, including project preparation, can best be supported by FCDO / BHC.

Team Leader, Production of WasteAid's Technical Guidance, Tools and Standards for Programming

> Leading a four-person team in the delivery of guidance and standards to help the WasteAid, a UK NGO operating in Africa and Asia, to deliver meaningful and high-impact waste management, recycling and circular economy interventions in lower- and middleincome countries (LMICs). There is a strong focus on supporting circular economy enterprises, as well as support to municipal recycling systems.

11/2021 Team Leader, Research on the Role of Mobile Big Data for Urban Climate Resilience, GSMA Mobile for Development

> Leading a team of digital innovation for sustainability experts to carry out research and prepare recommendations and workshop materials for the Climate Tech team to use to promote the role, use cases and partnership models for mobile big data to contribute to resilience against storms, flooding, droughts and extreme heat in urban areas in LMICs. As part of this project, deep-dives in Indonesia, Kenya and Mozambique enabled a strong understanding of the countries' climate vulnerabilities, digital ecosystems as well as relevant networks and stakeholders in government, civil society and the private sector.

02/2022 Team Leader, Mid-term Review (MTR) of the Australia-ASEAN Smart Cities Trust Fund (AASCTF), DFAT & Asian Development Bank (ADB)

Leading the three person MTR team to review the progress, relevance, effectiveness, impact and other aspects of this US\$16 million programme to improve systems and governance through the use of digital solutions in ASEAN Member States. AASCTF is funded by DFAT and implemented by the ADB and Ramboll. The programme is building government capacity in 26 cities across Cambodia, Indonesia, Lao PDR, Malaysia, Philippines, Thailand and Vietnam, and providing in-depth project pilots and financial investment led by ADB in around 8 to 10 secondary cities.

Climate Finance Expert, Support to GIZ's Cities Programme on Urban Resilience 09/2021 and Adaptation

> Providing flexible and on-demand support to GIZ over a 2-year period, to enhance the GIZ City Programme Team's understanding of potential urban adaptation partnership and financing options. This will result in a range of public knowledge products, as well as internal strategic advice on how the German Ministry for the Environment (BMZ) can contribute to urban adaptation financing and international partnerships such as the NDC Partnership and the CCFLA Alliance for municipal climate financing.

03/2021 Regional Lead, Scoping for Urban-ACT: Integrated Urban Climate Action for Low-Carbon & Resilient Cities in five Asia Countries, UNESCAP

Responsible for researching and producing a Regional Assessment Report and the China County-level Assessment Report, with inputs to the Indonesia country assessment report, to inform the programme design, to better integrate climate considerations into urban governance in five countries. Includes extensive consultation, including with relevant ASEAN fora and working groups and convening several programme design workshops to assess political feasibility and possible municipal and transboundary interventions, with thematic focus on low-carbon spatial planning, urban mobility and energy efficiency, solid waste management, biodiversity and urban resilience, including extreme heat mitigation.

06/2022

10/2022

03/2022

08/2022

09/2023

06/2021



07/2021 Team Leader, Scaling Innovation and Supporting the Entrepreneurship Ecosystem
- Across the Indo-Pacific, GSMA and DFAT

Managing a team of experts to provide support to nine startups across a range of business needs as well as supporting sustainable impact business approaches and measures. GSMA are working with Australia's Department of Foreign Affairs and Trade (DFAT) to support start up entrepreneurship particularly in South East Asia and the Pacific by focusing on sustainability, increasing the capacity of selected startups to scale their social and economic impact. There is a strong focus on improving the resilience of businesses to recover from the effects of COVID-19, continuing to create employment, including for women, to support sustainable growth and address the effects of climate change.

07/2021 Team Leader, Mapping Cases of Successful Utilization of Financial Instruments for
 Urban Climate Finance Projects, Climate Policy Institute (CPI)

Led a team of experienced climate finance and municipal financing experts to create a taxonomy for innovative financing instruments and funding mechanisms, followed by collecting 20-25 examples of successful case studies in a range of geographies including payment for ecosystem services, land value capture for natural assets such as urban parks and lease financing models that can enable more sustainable green buildings solutions such as for centralised cooling systems.

07/2020 Team Leader, Study for GSMA on the Role of Digital Solutions to help address

Climate Change in Low- and Middle-income Countries

10/2020 Led a team to produce an external GSMA briefing document on the role of digital solutions and business-led digital innovation to help address the challenges of climate change (both mitigation and resilience) and to assess and recommend relevant high-potential GSMA interventions that contribute to mitigating greenhouse gas emissions and increasing resilience to climate impacts. Link

10/2020 Team Leader, Research for GSMA Mobile for Development on Digital Solutions for Plastic Waste Management, UrbanEmerge

02/2021 Led research for the GSMA M4D ClimateTech team on digital innovation that can improve plastic waste management in LMICs, to inform GSMA's innovation fund. A global overview of relevant organisations and solutions was carried out followed by deep-dive research in seven countries in Africa and Asia to gain a detailed understanding of plastic waste value chains and the opportunities and constraints for digital solutions such as blockchain/distributed ledger for supply chain traceability, AI (image recognition) to help identify plastic types, and IoT related to waste collection efficiencies. Link.

01/2021 Project Director, Research for GSMA on digital inclusion policy for persons with disability and for women and girls in LMICs in Africa and Asia, UrbanEmerge

Overseeing and contributing to research and analysis of the policy landscape for more inclusive access to mobile internet for persons with disabilities and for women and girls. Policy was identified and assessed in terms of its effectiveness to overcome typical barriers to inclusion such as accessibility and affordability.

05/2021 Circular Economy Expert, Development of a Frontier Issues Paper on Circular Economy Trends for British International Investment (BII), UrbanEmerge

Deading a small team to assess trends and provide recommendations to BII on circular economy approaches in Africa and South Asia. This will guide their sustainable investment strategy over the coming five years. Circular economy approaches are vital to decouple resources inputs from economic growth and can be achieved across a wide range of sectors including water and sanitation, plastic waste management, manufacturing and mobility.

03/2021 Project Director, Project Preparation Support for the EU / UNIDO Poverty Alleviation and Inclusive Development across Rural Sindh (PAIDAR) Programme in Pakistan.

O6/2021 Part of the team providing expertise to UNIDO in sustainable and inclusive regional economic development in Sindh Province, with a focus on assessing economic sectors and clusters and advising how the programme can be designed to support greater rural productivity, urban-rural market and infrastructure linkages, including digital solutions, and climate resilient development.

02/2020 Lead Analyst: Assessing Climate Change Mitigation Options for the UK

Government's International Climate Finance (ICF) Portfolio, Global, UK Dept. for
04/2020 Business, Energy and Industrial Strategy (BEIS) / ASI

Part of the consultant team assessing 15 shortlisted themes, including mass transit, waste management, on-grid renewables, energy storage, industrial decarbonisation and sustainable consumption, that demonstrate high-potential in reducing greenhouse gas



emissions. Findings will define the investment strategy for the next stage of the £11 billion ICF fund. Public reports available **here.** 

04/202 - Team Leader, Study for GSMA on the Responsible use of Artificial Intelligence in 07/2020 LMICs in Africa and the Asia/Pacific Region

Led a research team of five experts to help GSMA's Mobile for Development (M4D) programme understand what the ethical and responsible use of AI actually means in practice in relation to the global Sustainable Development Goals as well as understanding the business models, opportunities and constraints of deploying AI-based solutions in developing markets, including by small and medium-sized businesses, such as **DigiSmart Solutions** in **Tunisia** who focus on IoT for efficiency in the water and agriculture sectors. A series of recommendations were made for entrepreneurs and innovators, international donors, policy-makers in the geographies of interest, mobile network operators and academic institutions. Report available **here.** 

11/2018 Urban Development Expert, Support to Cities Alliance implement the Joint Work
 Programme (JWP) on Cities in Global Agendas. Cities Alliance

Part of a pool of experts to support Cities Alliance over a two-year period on desk-based and in-country assignments, such as analysis diagnosis of specific city challenges and M&E support. This includes a review of the Diagnostic Report prepared with Cities Alliance support for the **Tunisia National Urban Policy**.

08/2020 Senior Evaluator, Evaluation and Learning for the Prosperity Fund Global Future Cities Programme, FCDO, Niras/WYG

O4/2022 Part of the three-person team responsible for evaluation of this complex £80million programme which aims to contribute to more sustainable, resilient and inclusive cities through targeted interventions on transportation, urban planning and urban resilience in ten countries worldwide (Brazil, Indonesia, Malaysia, Myanmar, Nigeria, Philippines, South Africa, Thailand, Turkey and Vietnam). The majority of city specific interventions focus on digital and data-driven solutions.

11/2018 - Team Leader: Preparing the DFID Urban Handbook to provide practical urban 04/2019 programme design and delivery guidance to DFID, PwC / SDD

Responsible for leading a team including specialists from Arup, PwC and SDD in preparing an Urban Handbook, to guide DFID staff and partners with practical advice and lessons as they conceptualise, design and deliver urban development programmes in Africa. The handbook included guidance on urban resilience and gender and inclusion in relation to digital inclusion, inclusive and accessible infrastructure development, land tenure, livelihoods and economic growth. **Link** 

02/2019 Sustainable Investment Specialist, Sustainable Investment Handbook for Chinese Companies investing in Ethiopia, Kenya, Mozambique and Zambia, WTO 07/2019 International Trade Centre (ITC), UNOPS.

Working with the ITC and FCDO-funded Partnership for Investment and Growth in Africa (PIGA), was responsible for consulting a range of stakeholders in China and the four African countries and drafting a 40-page accessible guide on the rationale and business case for responsible investment, specific requirements and best practice specific to each country. Sector focus on agro-processing and light manufacturing. Handbooks are **here.** 

04/2019 Evaluation & Learning Lead for Infrastructure and Energy & Low Carbon Programmes for the China Prosperity Fund, FCO, WYG

11/2020

05/2020

Part of the team delivering Evaluation & Learning for the entire £140m China Prosperity Fund portfolio of seven programmes. Leading evaluation and learning for the £12M Infrastructure programme to help Chinese companies finance and develop infrastructure in Belt and Road Initiative (BRI) countries, in a way that better complies with environmental and social requirements; and the £17m Energy and Low Carbon Economy Programme which promotes power sector market reform and includes a £4million Chatham House managed component to help improve climate risk communication and resilience.

09/2019 Researcher, World Bank Sustainable Cities Index for the Global Platform for Sustainable Cities, Economist Intelligence Unit (EIU) / World Bank

Undertook research and interviews to complete the index for the Chinese cites of Chongqing, Guiyang, Ningbo and Tianjin, across 60 factors including the effectiveness of strategic city planning, allocation of appropriate budgets, resilience, low carbon and water efficiency measures and digital solutions for city management. The benchmarking tool will also help cities track their own progress in achieving sustainability objectives.



12/2018 Learning Lead: Monitoring, Evaluation and Learning for the Sustainable Urban Economic Development (SUED) Programme, Kenya, DFID / Itad

09/2020 Responsible for implementing the Learning component, including facilitating learning workshops and producing evidence-based learning products. The objective of SUED is to help develop 12 of Kenya's secondary cities and towns into Strategic Green Growth Hubs, with significant emphasis on facilitating private investment to developing infrastructure and supporting climate resilient value chains in key economic sectors. Urban Economic Development Plans help local municipal governments to take a systems approach to planning and implementing more resilient and inclusive infrastructure and urban services.

03/2018 Team Leader, Making Cities Inclusive: Safe Mobility for Persons with Disabilities in
 Developing Countries. Humanity & Inclusion / UrbanEmerge

Define Dest practice and lessons learned across a range of HI and partner projects relating to the development-transportation-accessibility-inclusion nexus. Findings fed into a Policy Brief and several Thematic Factsheets, which supported HI advocacy to decision-makers at the *UN's 2018 High Level Political Forum (HLPF)* in New York, to review progress on the SDGs. Field work in Nepal and Lao PDR and remotely managed in Kenya, DRC, Burkina Faso and Haiti. Available *here.* 

01/2019 Team Leader: Scoping and Design of the UK FCO China Urban Climate Change Programme, PwC / SDD / UrbanEmerge

06/2019 Led a team to finalise the design of this £14m, 3-year Prosperity Fund programme to enable Chinese-British cooperation on innovative sustainable urban development practice. Key topics included nature-based solutions to enable resilient urban development and address multiple objectives including extreme heat, flood mitigation, biodiversity and access to green space, as well as digital solutions to improve energy and water efficiency and safer active transport infrastructure to encourage walking and cycling.

02/2015 Principal Consultant: Developing Rwandan Secondary Cities as Model Green
- Cities, Rwanda, World Bank / Global Green Growth Institute

O6/2015 Part of the team that supported the Government in progressing Rwanda's National Green Growth Strategy through the development of six secondary cities, particularly in the areas of inclusive, resilient and low-carbon urban economic development and spatial planning as well as infrastructure services and how these could create jobs. There was a focus on linking into Rwanda's ambition on leading digital economy growth in Africa.

09/2012 Regional Manager for Frameworks: PEAKS Climate, Environment, Infrastructure and Livelihoods (CEIL) Helpdesk, Worldwide, DFID.

08/2015 Managed the DFID Evidence on Demand helpdesk facility for high quality research and expertise in the thematic areas of Climate and Environment, Livelihoods and Infrastructure. Short background papers (Topic Guides) were produced to disseminate best practice and lesson learning to inform DFID Advisors on topics such as integrated transport and landuse planning; eco-systems based approaches to urban resilience.

09/2014 Project Manager: Evaluation of the Amplify Challenge Fund Programme, Multicountry, DFID

O8/2015 Amplify was an open, collaborative challenge fund implemented by IDEO, which allows people to collaborate globally and to come up with innovative solutions such as increasing economic opportunities for the youth in East Africa, making urban areas safer for women and increasing resilience, often used digital technologies. (e.g. AtmaConnect, an app that helps low income communities to navigate disasters or WeFarm, a digital service that provide agricultural advice to farmers in East Africa).

### **Selected Publications**

GSMA (2021) Digital Dividends in Plastic Recycling (Lead Author) - Link

GSMA (2021) The Role of Digital and Mobile Enabled Solutions in Addressing Climate Change (Joint Lead Author) - Link

ESCAP (2021) The Transition of Asian and Pacific Cities to a Sustainable Future: Accelerating Action for Sustainable Urbanization (Lead Author) - Link

GSMA (2020) Artificial Intelligence and Start-ups in Low- and Middle-income Countries: Progress, Promises and Perils (Lead Author) - Link

DFID (2019) The Urban Handbook for Sub-Saharan Africa: Harnessing Urbanisation for Inclusive Growth. Core Pack for DFID Country Offices and Advisors. (Lead Author).