MOTT MACDONALD

Climate change and our global communities

Understanding humanity's vulnerabilities and developing appropriate risk mitigation and resilience measures demands a rare set of expertise. You'll find them here.

We are an international development, management and infrastructure consultancy focused on guiding you through society's biggest challenges.

Climate change is an area of unprecedented global concern and significance. The regions of the world most at risk from the impacts of climate change are often more economically disadvantaged with the least robust infrastructure systems. The growing severity of climate related impacts demands urgent action to slow and stabilise global temperature rise, to manage and adapt to the already unavoidable impacts, and to identify and mainstream the social opportunities that investment in climate resilience will bring.

Our team comprises internationally recognised climate experts, IPCC authors, policy specialists, project preparation professionals, governance and investment specialists, and infrastructure engineers. We are collectively focused on the understanding of climate risks in international development, and align our expertise to advise and deliver the investment required to create a resilient society.



We can help you with

- National policy and adaptation planning
- Carbon management
- Climate finance and investment
- Service and asset system interdependencies, and system vulnerability to climate impacts
- Climate projections
- Climate change risk assessments
- Resilience guideline development
- Climate adaptation plans
- Investment and capital expenditure planning
- Urban and spatial planning
- Smart infrastructure solutions
- Economic and cost analysis
- Stakeholder engagement, capacity building and training
- Readiness activities
- Project preparation and funding applications
- Design review, implementation, monitoring and evaluation

Embedding resilience where it's needed most

Increasingly severe and frequent climate-related events such as prolonged drought, extreme rainfall, sea-level rise and coastal storm surges are resulting in more sustained harm to human safety, the disruption of livelihoods and increased physical losses measured in hundreds of billions of dollars.

As we approach the the threshold of dangerous climate change as defined by the Paris Agreement, we were engaged by the World Bank to produce guidelines for increased resilience of critical infrastructure such as dams, hydropower, water and sanitation – placing us at the forefront of setting resilience guidelines in these infrastructure sectors.

Promoting Climate Action interventions, backed by our approach to prioritised risk management against a backdrop of significant climate variability, helps equip our clients – and end user beneficiaries – with more informed and future-resilient choices.

Our key areas of focus:

Accessing climate funds
We have an in-depth understanding of multilateral and bilateral financing mechanisms, as well as project preparation from concept through to full proposal. We are also an accredited observer to the Green Climate Fund (GCF), and a key contributing member of the Climate Markets Investment Association (CMIA).

Climate change policy
We offer technical advisory services to help you understand, translate and formulate policy in order to deliver the appropriate climate change mitigation and resilience measures that support the Paris Agreement.

Resilient cities
Connecting with our urban specialists across all sectors, we can provide a complete resilience service, climate resilience capacity building, and aid in the development of adaptation planning.

Resilient infrastructure
We can provide you with a suite of tailored recommendations to address the impacts of climate change across various asset and service systems, assessing system interdependencies and vulnerabilities, on a risk-based, cost-optimised approach.

Investment and insurance sector services
We address specific investment and insurance concerns around climate change, such as finance risk, underwriting and stranded assets – both physical and financial. Our financial sector services target opportunities associated with mobilising private sector climate funding, co-funding arrangements with development finance institutions, insurance, and enabling PPPs.

Recent projects

We integrate climate resilience thinking into all service areas: cities and planning, infrastructure design, education, policy, thought leadership and finance.

We understand the need for a sound depth of understanding in all of these related and inter-dependent areas. We work closely with stakeholders to co-create interventions and turn these into effective resilience solutions. The following project examples show how our expertise bridges multiple sectors, drawing the best experience from each as we contribute to the development more resilient and empowered societies.



Transforming investment

Project
Tajikistan Climate Resilient Water Infrastructure Programme

Location
Tajikistan

Client
EBRD-GCF

Expertise
Climate governance, adaptation assessment, stakeholder engagement

Opportunity
Tajikistan, in line with international agreements under the United Nations Framework Convention on Climate Change (UNFCCC), is eligible for the Global Environment Facility's Special Climate Change Fund (GEF SCCF) and the Green Climate Fund (GCF), as well as the Climate Investment Funds' Pilot Programme for Climate Resilience (PPCR). These finance mechanisms are creating opportunities for recipient countries to build climate resilience through transformative investments that support priority socio-economic sectors, improved infrastructure and private sector growth.

Solution
A country-wide water programme to improve the climate resilience of household water services in twenty communities in Tajikistan and strengthen governance and necessary institutions to improve the climate resilience of household water services.

Outcome
All relevant environmental and social information required for accessing GCF funds was included in the documentation to support the EBRD application, specifically addressing the following areas of importance to the GCF: gender, climate change/adaptation assessment and stakeholder engagement and disclosure.

Piloting low carbon investment

Opportunity
To scale up climate finance in the public and private sectors.

Solution
Evaluation of a new approach of investing UK climate finance that aims to demonstrate that transformation to low carbon development is possible, replicable at scale, and commercially viable.

Outcome
Insight into how to mobilise low carbon investment in developing countries and whether the UKCI Pilot is a model that should be rolled out across the ICF.

Project
Evaluation of UK Climate Investment Pilot in India and East Africa

Location
India and East Africa

Client
UK Department of Energy and Climate Change

Expertise
Carbon investment





Guiding global resilience

Opportunity
To provide real-world climate resilient options for urban water, sanitation and hydropower service providers in developing countries, supported by the World Bank, to a range of potential climate changes and natural disasters.

Solution
Analysis of climate data, scenarios, costs, contextual elements, and financing options, as well as workshops and case studies from a variety of countries to provide evidence on how climate change is being tackled in the hydropower, urban water supply and sanitation sectors.

Outcome
Improved guidance on service delivery and sustainable management of these critical services. As a result, decision-makers' and service providers' activities are more 'climate informed' and responsive despite deep future uncertainties.

Project
Global studies on: (i) Climate Resilient Hydropower and Dams and (ii) Water Supply and Sanitation Services

Location
Global

Client
World Bank

Expertise
Technical guideline development, stakeholder consultation



Knowledge sharing

Project
Framework for Effectiveness and Resilience of Irrigation

Location
Nepal

Client
Climate Development Knowledge Network

Expertise
Climate projections, framework development

Opportunity
The Government of Nepal has made investing in irrigation a high priority, but there is increasing concern that climate change will affect the type of development needed, or require new approaches.

Solution
Improve the approach and methods for planning and delivery of efficient, effective, equitable and climate resilient irrigation systems. Assessment of current situation and practices, review of international best practice and climate projections to develop future guidance.

Outcome
A framework to increase the climate resilience and effectiveness of small and medium scale irrigation systems.

Mainstreaming climate resilience in resource management

Opportunity
Institutional and water law reforms which lay the foundation for long-term restructuring of the water sector necessary to support continued social and economic development.

Solution
Documenting best practice case studies, integrated water resource management planning, water tariff reform and future-proofing of a restructured water sector.

Outcome
Improved livelihoods through equitable access, knowledge dissemination, more sustainable use of water resources and community-level water savings.

Project
Water Resources Demand Management Assistance Project (WRDMAP)

Location
China

Client
Ministry of Water Resources, People's Republic of China

Expertise
Advisory work, benchmarking, knowledge dissemination, integrated water resource management





Technology transfer

Opportunity
Enhancing knowledge on climate technologies and financing to promote investment in Asia Pacific.

Solution
Consolidation of knowledge on climate policy, technology and finance. Review of climate technology investment models at ADB.

Outcome
Production of publishable reports to promote the work of the climate technology and finance centre.

Project
Transfer of Climate Technologies to Asia and the Pacific

Location
Asia Pacific

Client
Asian Development Bank Climate Technology Finance Centre

Expertise
Climate policy, climate finance



Prioritising action

Project
Using UK Expertise to Help Indian Cities Manage Climate Risks

Location
India

Client
UK Foreign and Commonwealth Office

Expertise
Decision support, policy, planning

Opportunity
To understand the climate induced risks faced by Indian cities and planned infrastructure, and suggest policy and investment responses based on UK experience and expertise.

Solution
Development of risk profiles for Indore and Amravati and a framework/ tool for a decision support system for city level policy makers.

Outcome
Robust insight into the vulnerability and exposure to climate change impacts faced by infrastructure and people in Indian cities, identification of hotspots for priority action, and ultimately protection of Indian and foreign investments in Indian cities.

Community level response

Project
Climate Change Response Strategy

Location
KwaDukuza, South Africa

Client
KwaDukuza Municipality

Expertise
Strategy, carbon footprinting, adaptation

Opportunity
The Municipality declared its commitment to better planning for the future and take climate change action during COP17 in Durban in 2011.

Solution
A climate change response strategy which identified mitigation and adaptation options for natural, built and socio-economic systems.

Outcome
Reducing the local carbon footprint and improving climate resilience. The strategy is also informing KwaDukuza's input to the International Council for Local Environmental Initiatives, helping to align strategies and processes.



Opening opportunities with connected thinking.

For more information, search 'Resilience, Mott MacDonald' or contact climate.resilience@mottmac.com

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