

Sustainability

How Mott MacDonald embeds sustainability in every project

Sustainability – the balancing of economic and social needs against the world’s capacity for production and regeneration – is crucial for our collective future.

As a global management, engineering and development consultancy, Mott MacDonald is driving the sustainability agenda through the concept development, design, procurement, operational and decommissioning phases of the project lifecycle to achieve greatest benefit with least possible harm.



Global photovoltaic capacity installed in 2008 doubled that in 2007

Mott MacDonald provides a full range of solar photovoltaic and solar thermal services and is working on projects in Spain, Germany, France, the Middle East, USA and India.

Benefits we bring to sustainable project development:

Global best practice

From landmark projects, through recognised experts

Cutting edge solutions

Challenging convention to keep pushing boundaries

Holistic thinking

Tackling complex, interlinked challenges through our huge diversity of disciplines

Proven track record

Award winning projects acclaimed for their sustainability credentials

Whole life approach

Assessing future performance upfront to inform strategic decision making

Our comprehensive approach to sustainable development offers an in-depth understanding of the most pressing social, economic and environmental dilemmas facing you today.

Buildings

Our approach to building design aims to reduce environmental impact through using passive design techniques that allow the building's active energy to be reduced. Buildings produce CO₂ through their process of construction (embodied energy) and the burning of fossil fuels in order to provide energy to deliver and produce materials. Heating, cooling and ventilating a building also produce high levels of CO₂. We work with you and your architects to integrate the design of structures and building services, incorporating low energy design techniques at the outset and thereby reducing energy consumption.

Vulcan House The UK Border Agency's Vulcan House in Sheffield achieved a BREEAM 'Excellent' rating thanks to the innovative approach to sustainability championed by Mott MacDonald.



25 industry awards

Manchester Civil Justice Centre – leading edge excellence in sustainable building design and engineering has made this new UK court building a monumental, award winning success.



The UK's largest dedicated biomass power station

Steven's Croft supplies 70,000 homes and displaces 140,000 tonnes of greenhouse gases. We provided full project management support during project implementation.

Environment

The breadth of our experience in all business sectors means our environmental experts understand the key issues that may arise on your project. Working alongside your planners and designers, we identify changes and mitigations that make a real difference. Our services include ecology, environmental impact assessments, landscape architecture, climate change, conservation and biodiversity enhancement, pollution monitoring and remediation, carbon footprinting, flood protection and waste management. We can also give you business policy and strategy advice, environmental management plans and advice on environmental risks and liabilities.

Eurasian Steppe Restoration Project Severe erosion of Eurasian steppe grassland has led to a drastic decline in agricultural productivity and large scale depopulation of rural areas. We've been involved in a two and a half year programme to try and reverse the decline. The project won the Environmental Impact Award at the 2008 British Expertise Awards.

Energy

Our integrated service covers all technical, commercial, regulatory and environmental aspects of renewable projects. We bring world class expertise in the latest generation technologies – wind, solar (PV and thermal), hydro, biomass, tidal, wave and waste to energy.

Cruach Mhor Wind Farm We provided technical advice to ScottishPower for the Cruach Mhor Wind Farm which comprises 35 wind turbines with a total generation of 30MW, delivering enough green energy for around 17,000 homes in Scotland and displacing more than 60,000 tonnes of greenhouse gases.

Water

Our skills and breadth of expertise in the water sector extend globally and encompass all aspects of the water cycle and beyond. Whether your business involves water resources, water supply or wastewater, we provide innovative solutions. From flood risk assessment and urban drainage to our cutting edge coastal management expertise, we are contributing to the longer term sustainability of communities and the environment. We've been improving the sustainability of the water industry through a range of initiatives including whole-life carbon costing for water engineering schemes to innovative processes for renewable energy generation from sewage sludge.

Sewage sludge treatment project We're helping Anglian Water to introduce a new treatment process that makes sewage treatment plants energy self-sufficient while reducing biosolid waste, offering annual operating expenditure savings of £3 million.



We helped develop the Abu Dhabi Surface Transport Master Plan to deliver a world class transport system comprising regular and reliable regional rail, metro, tram, bus, taxi and ferry services.



30 million people rely on Africa's Lake Victoria

We're providing sustainable sanitation and water management strategies to improve the aquatic health of Lake Victoria, Africa's largest lake, bordered by Kenya, Uganda and Tanzania.

Transport

Mott MacDonald promotes sustainable transport systems by designing more energy efficient solutions and promoting initiatives to encourage behavioural change at the household and individual level to reduce car use. Our work covers all sectors from rail, road, air and sea. Our input ranges from creating real-time traffic information websites that help the UK's Highways Agency combat congestion to reducing greenhouse gas emissions in the rail sector through more efficient construction techniques.

Cycling initiatives for Transport for London (TfL) We are project managing the £6 million cycle parking facilities for schools programme, which has currently delivered more than 16,000 cycle parking spaces across London. We're also providing advice on all highway development schemes throughout TfL's road network, ensuring appropriate cycle-friendly measures are installed, as well as supporting special projects including the recently opened London Bridge cycle park that provides over 400 undercover spaces.

Communities

Social development is an essential part of sustainable development, transforming social structures to improve society's capacity to fulfil its aspirations. We work with you and local communities to protect and, where possible, promote social development processes throughout sustainable infrastructure projects.

Development and Rejuvenation Plan for Howrah in India

On behalf of the UK Department for International Development we developed a rejuvenation plan for Howrah. The plan helped minimise social conflict by contributing to communities' long term vitality and resilience through planning and infrastructure that promotes residents' health and wellbeing.



Working with the American Red Cross we've been providing permanent water supply systems in Aceh, Indonesia. To promote sustainable solutions village elders and residents were involved at the outset.

Health and education

We're combining our health and education expertise with cross-cutting skills in water and sanitation, environment and infrastructure to help bring about positive change for vulnerable communities and work towards the targets espoused by the Millennium Development Goals. These goals range from halving extreme poverty to combating disease and providing universal primary education, all by the target date of 2015. Supporting global and national responses to HIV and AIDS, we are working with governments, bilateral development agencies, multilateral agencies, global health partnerships, national institutions and non-governmental organisations.

China-Australia Health and HIV/AIDS Facility Our health team in Beijing is supporting in-country implementation of AusAID's China Australia Health and HIV/AIDS Facility. The facility aims to improve China's capacity to prevent and care for HIV infection, protect its population against emerging infectious diseases and strengthen its health systems.



We are working on the Khanyisa Programme in Limpopo Province, South Africa to improve curriculum planning, teaching and academic performance in primary schools. There has been a strong emphasis on providing a sustainable system that local education professionals can adopt and develop.

Waste management

Our expertise in waste management and recycling is shaping the future of the waste and resource industries. Through technical and commercial best practice we provide pragmatic and innovative solutions for the demands of this evolving industry. From devising recycling, resource recovery and residual waste strategies to advising on the finance and procurement of waste treatment facilities, our expertise covers all aspects of waste and resources management.

Norfolk County Council construction waste management

We have been assisting Norfolk County Council on a number of projects in the waste field including waste strategy, the design of recycling and disposal facilities and the provision of site waste management plans for council planning applications.

Improving our own performance

In 2008 we committed to reduce our own environmental impact by cutting our carbon footprint through an active programme which will help make significant year on year reductions in our per capita carbon emissions. To measure this we produced our first Group-wide carbon footprint calculation – approximately 36,000 tonnes of CO₂ or 2.8 tonnes per employee in 2008. Our footprint will be reduced through a number of initiatives set out in our Group Carbon Action Plan published on our website and promoted among our worldwide staff.



Our goal to reduce our own carbon footprint across the global Mott MacDonald Group incorporates a hearts and minds campaign including posters and an e-learning course.

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To find out more see

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