

Peter Rawlings

Partner



Exhibit A-49

Peter is a Partner based in the London office and is a sustainability and climate change expert. Peter's areas of expertise focus on the development and implementation of climate change and sustainability strategies, resource and energy efficiency, carbon management, life cycle assessment and GHG inventory development. Peter has extensive experience of a range of sectors, including energy & utilities, mining and metals, property & infrastructure, transportation and banking and finance, and he is conversant with NEPA requirements and international standards such as the IFC Performance Standards and the Equator Principles.

Prior to moving to London in early 2017, Peter was based in ERM's Washington D.C. office, where he led multiple climate change and greenhouse gas assessment projects across North America and South America. Prior to this, Peter was based in ERM's Sydney, Australia office and was ERM's regional Sustainability & Climate Change practice lead for Asia Pacific.

Peter has been with ERM for 10 years, prior to which he worked for four years as the Sustainability Manager for a major infrastructure group operating across the Asia Pacific region. Prior to this, Peter worked in environmental consultancy in the UK supporting the infrastructure and property sectors working across the UK, Ireland, Europe and the Caribbean.

Professional Affiliations & Registrations

- Registered Category 2 Greenhouse & Energy Auditor, Australia (2012)
- Green Star Accredited Professional under the Australian Green Star Rating Scheme (2007)
- LEED Accredited Professional (2007)

Fields of Competence

- Climate change and carbon management
- Sustainability strategies and implementation
- Climate risk and resilience
- Energy and resource efficiency strategies
- Community and stakeholder engagement
- Risk management
- Environmental due diligence and compliance

Education

- Post Graduate Diploma in Earth Sciences, Open University, UK
- MSc Environmental Pollution Control (with Distinction), University of Central England, UK
- BSc Applied & Environmental Biology (First Class Honours), University of York, UK.

Languages

- English (native)
- Spanish (basic)

Key Industry Sectors

- Infrastructure
- Energy
- Mining & Metals
- Construction & Property
- Transportation
- Supply Chain & Construction Materials
- Banking & Finance
- Government

Selected Experience

A selection of Peter's recent projects include:

Sustainable finance support for development of a subsea natural gas field in Israel, Noble Energy-Leviathan, 2012-Present

Peter is leading ERM's team that has been engaged by Noble Energy to provide consulting services in support of obtaining political risk insurance for the Leviathan gas development off the coast of Israel. Peter has led the project team covering a range of environmental and social matters, including the assessment of GHG emissions and the implications of these, as well as and providing guidance on issues related to climate change impacts and risks to the project from climate-related issues.

Urban Development and Climate Change Studies, Multiple Cities across Latin America and the Caribbean, Inter-American Development Bank, 2012-Present

Peter is the Project Director for this series of projects, which aims to advance the IDB's Sustainable Cities Initiative in cities in LAC countries by developing an understanding of urban dynamics, climate change impacts and vulnerabilities, and potential actions that cities can take to enhance urban sustainability. The projects include the development of detailed GHG inventories for the cities including across key sectors including energy, transportation and industry.

Pilgrim Pipeline Greenhouse Gas Analysis, Pilgrim Pipeline Holdings, LLC, 2015

Peter led the ERM team performing a GHG assessment of the proposed pipeline system that consists of two parallel pipelines - one for crude oil transport from Albany, New York to Linden, New Jersey, and the second for the return of refined petroleum products back from Linden, New Jersey back to Albany, New York. ERM's analysis compared GHG emissions from transporting the crude and refined products on the proposed Pilgrim pipeline project versus the current method of transporting the same volumes of crude and refined products along the Hudson River using barges.

Climate Change and Greenhouse Gas Impact Analysis. Confidential Mining Project, Armenia, 2014-2015. Peter led the ERM team that performed an assessment of GHG emissions from a mining project and considered the impact of climate change from the project.

Climate Change Impact Analysis. Keystone XL Pipeline, United States, 2012-2014. ERM was contracted to serve as the third-party consultant for the U.S. Department of State to prepare a Supplemental Environmental Impact Statement (EIS), consistent with the National Environmental Policy Act (NEPA), Endangered Species Act (ESA), and National Historic Preservation Act, for the Keystone XL Pipeline Project. Peter led ERM's team conducting a detailed greenhouse gas assessment of the project considering its direct and indirect emissions associated with construction and operations, as well as life-cycle incremental emissions linked to the extraction of Canadian oil sands and the ultimate end-use combustion of refined products. In addition, ERM performed an assessment of the projected climate change impacts of the pipeline routing. The assessments of the impacts of climate change considered the Project, the no action alternative and major route alternatives.

Proposed Nicaragua Canal - Climate Change Assessment 2014-2015.

As part of the broader Environmental and Social Impact Assessment (ESIA) that ERM prepared, ERM performed a GHG inventory and a climate risk and adaptation assessment of the proposed canal routing from the Caribbean to the Pacific side. ERM assessed the expected GHG emissions due to the project, and also the potential hazards that exist across the routing and worked with a downscaled Circulation Model that provided 25 km horizontal resolution in order to assess potential impacts. In addition, ERM provided extensive surface water modelling to assess the potential impacts of climate change on the water regime associated with the project, and ERM also performed disaster risk considerations looking at potential for earthquakes, flooding and tropical storms. Peter was ERM's senior technical climate change advisor to the work.

Confidential Client, GHG Inventory, 2009-2012

Peter was the Project Partner for the development of a GHG inventory and carbon management plan for a major coal seam methane project in Australia in support of the ESHIA. The study covered the upstream gas extraction fields as well as the midstream processing facilities.

Greenhouse and Energy Audits, Various Organisations, Australia, 2011-2014

Peter has been the lead auditor on over 12 greenhouse and energy audits (both reasonable and limited) under the National Greenhouse and Energy Reporting (NGER) Act 2007 in Australia. Peter has performed these audits both for private sector clients as well as on behalf of the

Clean Energy Regulator at the Department of Climate Change & Energy Efficiency (Australian Government).

Assessment of Mexico's Carbon Capture and Storage Readiness, Global Carbon Capture and Storage Institute, 2011

Peter directed a joint study between ERM and the GCCSI into an assessment and capacity building exercise in Mexico to determine the country's CCS readiness based on the GCCSI's rating system.

Assessment of Climate Change Adaptation, Confidential Mining Client, Global, 2010

Peter directed a study on behalf of a major global mining company to assess and interpret the emerging legislative frameworks across global jurisdictions as a result of climate change.

Chongqing Low Carbon Study, China, British Consulate General in Chongqing, acting on behalf of the British Government Foreign and Commonwealth Office (FCO), 2010-2011

Peter played an advisory role in ERM's team which undertook a detailed study into the most applicable international trends and best practice in low carbon development that could be applied to reduce Greenhouse Gas (GHG) emissions for Chongqing. The study focussed on three sectors – namely energy, petrochemicals and automotive manufacturing.

Quantifying the Benefits of Resource Efficiency to the New Zealand Economy, 2010-2011

On behalf of the NZ Ministry for the Environment (MfE), Peter led a study that quantified the financial benefits of resource efficiency within key sectors of the New Zealand economy. The work seeks to provide a solid evidence-based foundation on which resource efficiency measures can be compared and promoted to industry and through policy.

Legislative Risks and Opportunities, Iron Ore Value Chain, Confidential Client, 2011

Peter directed a multi-national team in the completion of an assessment of the current, imminent and likely future opportunities and risks to the iron ore value chain across a number of jurisdictions around the world that may occur as a result of regulation and climate change policy down the chain. The study covered the entire value chain – from iron ore extraction and transport, manufacturing, use, extended producer responsibility and end-of-life.

Greenhouse and Energy Audits, Various Organisations, Australia, 2011-2014

Peter has been the lead auditor on over 12 greenhouse and energy audits (both reasonable and limited) under the National Greenhouse and Energy Reporting (NGER) Act 2007 in Australia. Peter has performed these audits

both for private sector clients as well as on behalf of the Clean Energy Regulator at the Department of Climate Change & Energy Efficiency (Australian Government).

Global Energy Efficiency Programme, Confidential Mining Company, 2011-2012

Peter worked as part of a global ERM team to help a multinational resources company prepare and deliver an energy efficiency strategy across its global business. Peter is coordinating a number of the key workstreams including the piloting of the work across a number of Australian facilities and also ensuring consistency with the EEO framework.

UNEP Green Building Guidelines, Global, 2010

Peter managed a contract to develop a GHG reduction guide for the United Nations which will be implemented across all of its existing buildings, offices and stations across the globe. This amounts to over 530 UN locations, as well as facilities for a range of other international donor agencies.