OPTIMISING BUSINESS PERFORMANCE
REDUCING RISK AND PROTECTING PEOPLE AND THE ENVIRONMENT
OPTIMISING BUSINESS PERFORMANCE BY REDUCING RISK AND PROTECTING PEOPLE AND THE ENVIRONMENT

OUR TEAMS FOCUS ON HELPING OUR CLIENTS TO:
• Turn environmental challenges into a competitive advantage
• Create sustainable solutions that add value to the bottom line
• Deliver high levels of safety and business performance.

All environmental and safety and risk management challenges are unique, and as such, need a unique offering: one that is tailored to meet our clients’ needs. At Arcadis, we focus on delivering measurable positive outcomes combined with outstanding credentials and technical excellence in Environment and Safety & Risk Management.

By integrating environmental innovation and engineering services, along with safety and risk management, Arcadis is a leading player in developing technical and business-focused solutions that help underpin the safe operation, environmental sustainability and ultimate success of some of the world’s leading companies. Here, we outline some of the major challenges that our clients face and how we help to meet them.
The increasing legal and accounting requirements to declare balance sheet liabilities associated with remediation of environmental damage can have a significant impact on a company’s financing and reputation.

At Arcadis we help our clients to understand, quantify and control health, safety and environmental risks arising from mergers and acquisitions, major capital projects, and day-to-day operations.

Our technical expertise, built on years of experience, allows us to provide greater clarity and quantification of liabilities across the asset lifecycle. We use advanced risk profiling techniques to help our clients prioritise and manage their investment programmes and identify levels of HSSE Risk through bringing together multidisciplinary teams of recognised experts. Our aim is to allow our clients to focus on their core skills where they can add most value to their businesses.

We helped to successfully divest 500 petrol stations by conducting rapid statistical evaluation of the environmental liability assessment for the portfolio. Through this assessment we reduced the uncertainty in land condition liability costs by 70%.

For a global trading company, we assessed compliance and legacy issues for due diligence on a major downstream oil company network in Africa. The target portfolio consisted of 20 oil terminals/depots, 400 fuel stations, and airport refuelling operations in 8 countries through mid-Africa. Arcadis worked alongside the client’s deal-making team during a rapid 3-week site appraisal of key assets. Our reporting outputs and financial modelling underpinned a clear understanding of liability provisions, and future Capex and Opex needs.

CREATING ASSETS THAT ARE CLEAN AND SAFE
Across the corporate world we are seeing a growing focus on good governance and HSE performance as a source of both risk and potential competitive advantage. All organisations need to demonstrate that their Duty of Care and other legal obligations have been met; and increasingly seek to ensure that safety and environmental requirements are considered at concept and all subsequent asset lifecycle stages.

We help our clients to demonstrate to all their key stakeholders that the management and mitigation of safety and environmental risks are being played out effectively. We develop and implement efficient organisation and delivery models to achieve improved environmental and safety performance as well as improved business performance. For major capital projects, we deliver safe system design and minimisation of environmental impact through industry leading structured processes and methodologies. All in all, we provide assurance to stakeholders that safety and environmental requirements are an integral part of our clients’ asset planning.

We have worked with organisations across the oil and gas, rail and energy sectors to support their impressive safety records by developing safety cases and other regulatory compliance documentation. The underlying risk assessments have identified numerous safety enhancements and risk reduction measures to further enhance their safety performance. We used GIS-based methodology to model over 230km of Oil and Gas pipelines against flooding and environmental sensitivity datasets. This identified potential weak spots that need more detailed assessment to avoid loss of production or damage to the environment.

A major fire and explosions at a UK Oil Terminal threatened long term imbalance for the South East’s fuel supply. We provided a full range of environmental and engineering skills, coordinating the client’s in house and associate technical specialists. The replacement scheme was taken from charred remains - to concept - to submission of planning application within only seven months. Our task was to help secure the recovery of a nationally strategic asset.

PUTTING SAFETY AND THE ENVIRONMENT AT THE HEART OF ASSET PLANNING
All companies are under greater scrutiny and need to protect their “license to operate”.

Our clients need to be regulatory compliant and protect their reputation but also seek greater operational effectiveness to drive competitive advantage. We provide fully integrated compliance solutions ensuring business protection and the safeguarding of brand reputation.

We help companies understand the impacts their activities have on the community / environment and assist them to realise the returns associated with resource protection. We do this through comprehensive environmental management aligned with business objectives. Our clients are then able to maximise their operational efficiencies whilst meeting regulatory requirements and running a more sustainable operation.

We supported a global oil company with an Improvement Plan and Environmental Coaching on permitting and compliance requirements associated with their offshore gas platform in the North Sea.

This addressed key environmental requirements and the implications of non-compliance; whilst also significantly increasing demonstrable compliance with offshore operation legislative requirements.
Globally competitive markets with increasingly finite resources are creating pressure for companies to be more efficient and cost effective in use of assets. Resource costs of all kinds are increasing and thereby impacting negatively on operating costs. We help companies optimise operational efficiency across their portfolio in order to increase output from limited resource. Our focus is on analysing performance and developing new systems, processes and technologies that will increase asset availability and optimise the use of resources. We help our clients to operate safely whilst minimising operational downtime. We also help to manage key resources such as water and energy and minimise waste and emissions.

Increasing Asset Availability and Optimising Resources

Across a metropolitan rail network, our teams have helped to improve operational availability and reduce the potential for performance penalties which ranged from several £000’s (e.g. escalator unavailability for a few hours) to several £million (e.g. major derailment preventing train operations for many hours or days). Examples of the projects we work on include the development of safety and reliability models for signalling, electronic and mechanical systems together with the design of line and station control rooms.

Remote monitoring of a rail electrification system using the Short Circuit Analysis Tool (SCAT) has massively improved the availability of a rail network line. SCAT is a unique electrical fault monitoring system that reports failures using SMS messaging and a secure website where engineers analyse the fault data. SCAT determines the location of actual failures as well as pre-cursors to failure to a high accuracy. This also eliminates the need to travel long distances trying to locate failures. This has delivered savings estimated at £1m alone through identification of pre-cursors to failure on one part of the network. More significant savings are predicted if the system is deployed nationally.

We supported a major professional services firm in achieving ISO14001 standard, focusing on their London campus and 23 regional offices across the UK. We also calculated and verified their carbon footprint and implemented Green Procurement and Green Building programmes. These initiatives have embedded an on-going improvement in carbon management and ensure sustainable practice in normal operations.
There is increasing consolidation across major process industries and a trend to relocate production to new emerging markets and take advantage of new technologies and therefore exit non-producing or legacy sites. Firms therefore seek to redefine or redevelop their assets and manage future environmental liabilities whilst maximising value, meeting regulatory requirements and enabling site re-use.

We use innovative risk and remediation strategies to turn land condition liabilities into assets and enable the redevelopment/resize of legacy sites thereby generating greater returns from the asset supported by a strong regulatory position. We do this by applying a unique combination of market leading technical expertise and regulatory and business knowledge to develop site exit strategies safely with increased certainty.

We provide improved definition and management of asset liabilities by comprehensive risk evaluation. Asset value is enhanced through comprehensive assessment and optioneering, unlocking the potential for future re-use by understanding and managing risk through a suite of technical, business and strategic services. We assess liabilities and risks, then develop and implement the best remediation strategy and support site deactivation, decommissioning, decontamination and demolition. This is achieved whilst keeping key stakeholders engaged and where necessary negotiating with the Regulator and planning for sustainable regeneration.

TURNING LIABILITIES INTO VALUABLE ASSETS

We are the world’s leading provider of brownfield remediation and regeneration services and known for our innovative solutions. We’ve been recognised in the UK by winning 4 Brownfield Briefing Awards since 2011, for projects involving innovative research, complex site investigation programmes, laboratory work, field-scale trials and creative clean-up solutions. We combine these skills to bring our clients £multi-million cost savings over conventional approaches, unlocking the value in brownfield sites whilst carefully managing risks, reputations, and regulatory relationships.
WHAT WE DO

Redefining Assets
Corporate Environmental Strategy and Transformation
• Reserves Management
Site Exit/Closure/Decommissioning/Safety
• Environmental Due Diligence
• Site Assessment and Remediation
• Liability Evaluation/Options Appraisal
• Environmental Risk Assessment
• Human Factors Engineering
• Permit surrender
• D4/Safety and Risk Management
• Waste Management/Asset Management

Planning Assets
Corporate Environmental Services
• Resource Management (Water, Waste, Energy/Carbon)
• Management Systems (Health and Safety, Environmental)
• Product Stewardship
Asset Management
• Integrity Management
• Performance Modelling/Compliance/Audit
• Reliability, Availability, Maintainability and Safety (RAMS) Analysis
• Incident Preparation/Response/Recovery

Creating Assets
Acquisition/Development Planning
• Site Selection and Feasibility/Due Diligence
• Environmental Baseline Assessment
• Permitting and Environmental Impact Assessment
• Sustainable Design
Safety and Human Factors Engineering
• Hazard Identification (HAZID, HAZOP, SIL/IPF)
• Failure Analysis (incl. causal analysis)
• Modelling of the consequences of major hazards (e.g. explosions, radioactive release, derailments)
• Quantified Risk Assessment
• Safety Assurance and Compliance
• Human Factors
• Cost Benefit Analysis
• Emergency Planning

Operating Assets
Technology and Innovation
• Remote Monitoring Systems
• Transport System Modelling (e.g. capacity)
• Control Room Design
Environmental Planning
Permitting and Compliance
• Materials and Waste Management
• Geotechnical and Drainage
• Environmental Permitting and Regulatory Compliance
• Planning Applications and Environmental Conditions
• Sustainability Cost Benefit Analysis

Exceptional & Sustainable Outcomes
CONTACT

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