RED

THE WORLD'S LEADING DESIGNER OF COMPLEX BUILDINGS

BUILT ENVIRONMENT

CAPABILITY STATEMENT

Market-leading Engineering Design consultancy specialising in the **Built Environment** worldwide, with unrivalled expertise in delivering **innovative** and sustainable solutions.

ABOUT RED

As a global powerhouse of engineering design, RED has spearheaded the drive toward achieving the zero-carbon objective for two decades. Our unwavering commitment to sustainable innovation is the cornerstone of delivering transformative, commercially viable, low-carbon solutions, positioning us as industry leaders dedicated to a sustainable future.



Award Winning and International



Market Leading **Technical Expertise**



Trusted Advisor



Sustainable Engineering Solutions for the Built Environment



Founded in 2004



Specialist Engineering and ICT Solutions

Industry Awards

850+

Employees

Offices in Key **International Cities**

Countries with **RED Projects**

Languages



WHY CHOOSE RED?

RED's reputation is built on a foundation of unparalleled technical expertise. We're proud to boast a team of specialists at the forefront of innovative solutions. Our international presence ensures a global perspective, allowing us to address complex challenges with a diverse and inclusive approach. Client trust is paramount, earned through a track record of delivering exceptional results and maintaining an unwavering commitment to our clients' success. Moreover, our dedication to sustainability is embedded in every aspect of our work, reflecting a conscientious effort to create environmentally responsible solutions for a brighter future.



Our People

A talented team and staff retention rate of 90%+.



Repeat Business

We have long standing partnerships with our clients and a repeat business rate of 84%.



Global Delivery Strategy

Global offices provide a 24 hour working day.



Technical Ability

Digital services and in-house technologies to transform vast amounts of information into digital tools.



Growth

We have sustained yearon-year growth since 2004.



Global Network

Our offering is further complemented by our parent company, Tractebel.





OUR CORE VALUES

Our people are our greatest asset. Recognised for our dedication to workplace well-being, RED proudly attains "Gold" in Mind's Workplace Wellbeing Index and recently won MEP Middle East's "Wellbeing Initiative of the Year" award for our RED Wellness program. Our success hinges on the exceptional work our team delivers daily, and we place physical and mental wellness at the centre of our strategy to drive employee performance, happiness, and engagement.



We Are Bold We dare to try.



We Are OpenWe work together with collective strength.



We Are DemandingWe are always willing to go the extra mile.



We Are CaringAn environment based on trust and respect.

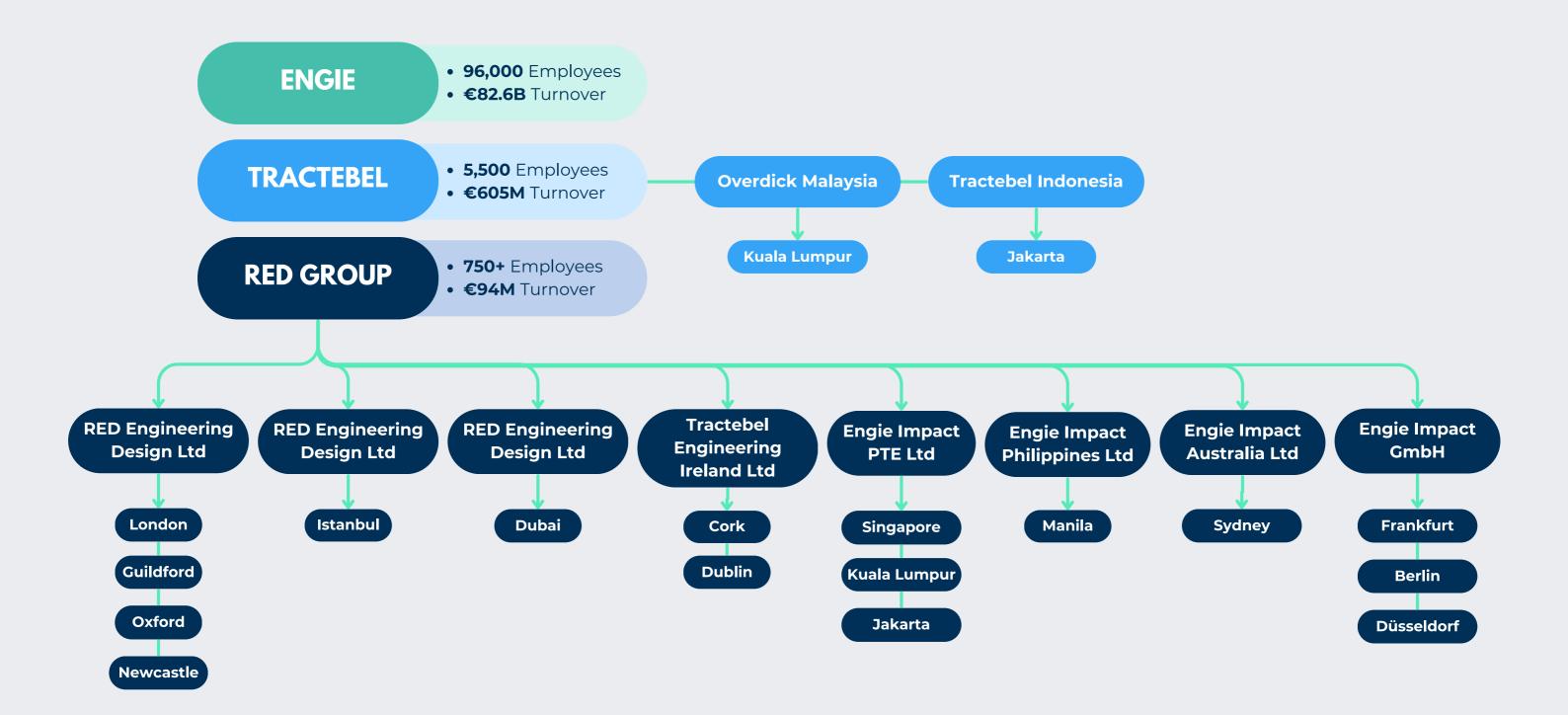


WORKPLACE WELLBEING

RED has been recognised for its commitment to workplace wellbeing and is proud to have achieved "Gold" in Mind's Workplace Wellbeing Index.

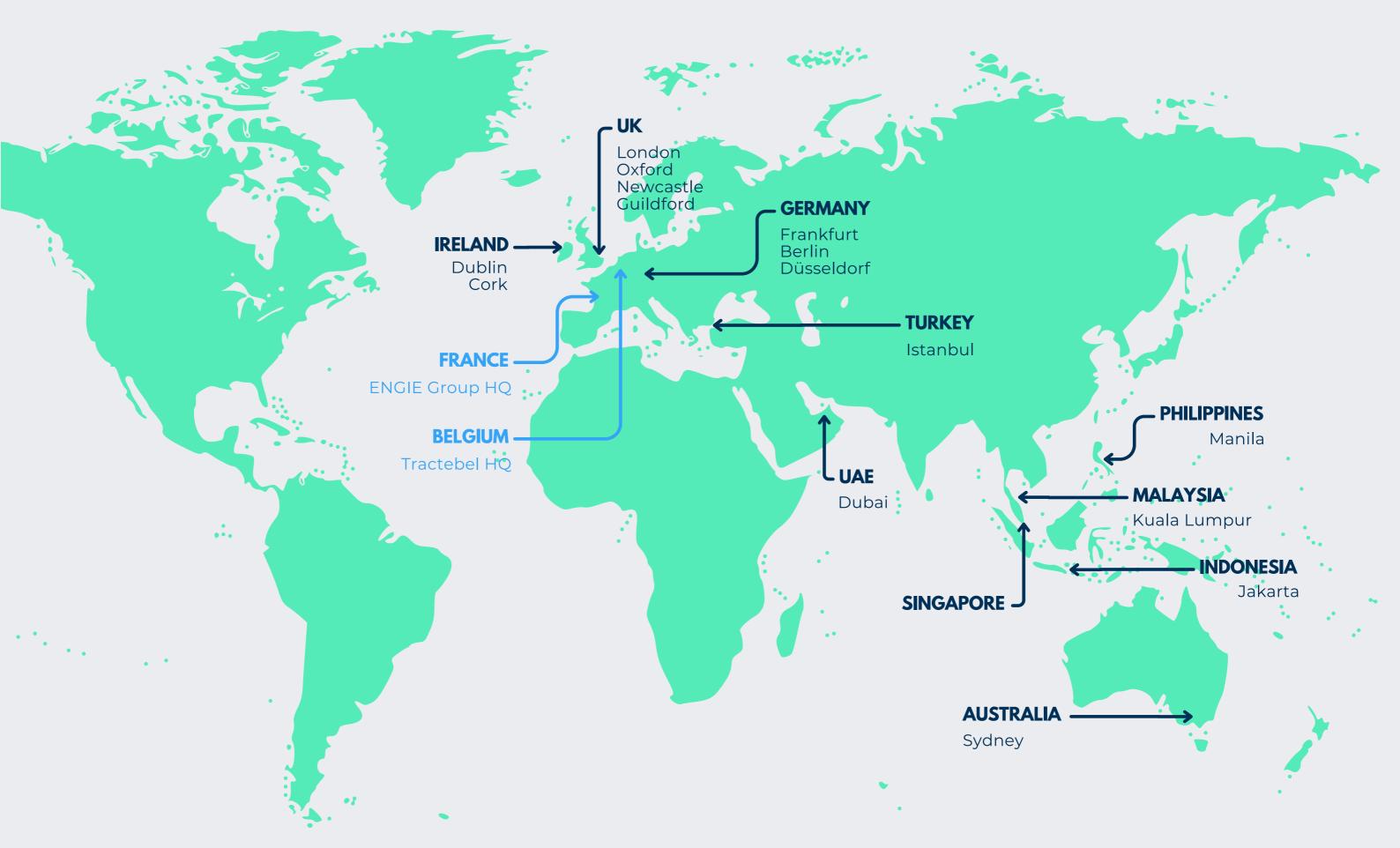


HOW WE OPERATE





RED'S GLOBAL PRESENCE





TRACTEBEL

RED Engineering Design is a company of Tractebel, a global leader in sustainable innovation. Backed by more than 150 years of experience, Tractebel is a community of over 5,500 passionate experts across the globe, committed to ethical business and leading the fight against climate change. Tractebel is part of the ENGIE Group, a global reference in low-carbon energy and services.



Energy

- Power & Heat
- Renewable Energy
- Power Transmission & Distribution
- · Gas



Water

- Water Resources
- Hydraulic Infrastructures
- Hydropower
- · Coasts, Ports & Use of Water Resources
- Digital Services



Infrastructures

- · Urban, Design & Development
- · Environment & Climate Change
- Transport & Mobility
- Buildings & Complex Structures
- Geo-Engineering



Nuclear

- · New Build
- Advanced Technologies
- · Plant Operation Support
- Radwaste, Decontamination & Decommissioning

As RED's parent company, Tractebel offers an additional range of expert engineering services to clients by leveraging its global presence and vast experience in sustainable design practices.

Tractebel's expertise are trusted worldwide across multiple markets like nuclear, renewables, power & gas, electrical grids, hydropower & dams, water resources & supply, desalination, complex & high-tech buildings, transport infrastructures, and ports & waterways. This enables Tractebel to provide comprehensive solutions tailored to the specific needs of clients.

By connecting strategy, design, engineering, social & environmental studies, project management and in-house digital applications, we partner with companies and public authorities to create a positive impact on people and planet. This holistic approach ensures that engineering solutions are not only technically sound but also environmentally sustainable and socially responsible.

Backed by more than 150 years of experience, today Tractebel is a community of over 5,500 passionate experts across the globe, committed to ethical business and the fight against climate change. Tractebel is part of the ENGIE Group, a global reference in low-carbon energy and services.





EXPLORING SECTORS

RED's operations are divided into several sectors to cover the cutting-edge services that we provide across the Built Environment and Data Centre markets. By seamlessly navigating various sectors, we position ourselves as a go-to partner for innovative, efficient, and sustainable engineering solutions.



Data Centres

Cloud Colocation End User Managed Services Modular



Commercial

Commercial Office / Mixed Use Workplace fitout Retail



Lifestyle

Hotels Venues Residential Heritage



Life Sciences

Pharma & Biotech Medical Devices



Transport & Aviation

Bus depots Airport terminals Manufacturing



Warehouse Logistics

Warehouses /
Distribution Centres
EV Infrastructure
Utility Due Diligence &
Negotiations



Public Sector

Healthcare Government Education Aviation Defence Court Buildings



Industrial

Industrial Food & Beverage General Chemical Process Plant





COMMERCIAL

We prioritise human health and quality of life in commercial developments, aiming to optimise productivity, sustainability, and circularity. RED specialises in designing new buildings and upgrading existing ones, collaborating with developers, architects, consultants, and contractors in various contract arrangements. We understand the importance of meeting industry standards and compliance for successful project delivery, including environmental, water, and energy objectives.

Apple Store, Instanbul

First Standalone Apple Store in Turkey. RED provided MEP design, permit, construction supervision, test and commissioning services.







The Relay Building

RED was appointed to undertake a due diligence survey and report for the purchase of the mixed use residential and office building at One Commercial Street. Subsequently RED was appointed to provide the MEP design for the Cat A fit out of 9,000m2 of speculative office space and major refurbishment of the Commercial reception.

Commonwealth Bank of Australia, UK

Relocation of a major multinational financial institution London-based European headquarters to a newly constructed developer building. RED was asked to assist with finalising negotiations with the landlord and to develop the design of the Cat B fit-out, including trading, back office functions, staff facilities and client suites.





LIFESTYLE

We meticulously attend to a diverse range of projects, including hotels, sporting venues, and mixed-use developments. Our expertise involves crafting pragmatic design solutions tailored to individual clients, meeting specific criteria or brand standards for experienced developers. Our approach maximises value and promotes sustainable design principles.









WAREHOUSE LOGISTICS

We bring a unique and diverse approach to warehouse and logistics buildings globally, drawing on our extensive knowledge in this sector and a pool of trusted clients. As a key design partner, we have worked with many retailers, developers, and tenants, contributing to projects ranging from fully automated to refrigerated warehouses. Additionally, we possess extensive expertise in the infrastructure for the electrification of delivery fleet vehicles.







A company of TRACTEBEL

PUBLIC SECTOR

With expertise in public buildings, we prioritise meticulous attention and care for each project. Our versatility shines through in creating custom designs for unique clients and adhering to strict criteria or brand standards for seasoned developers. Our goal is to maximise value and foster sustainable development.



Government and Court Buildings, UK Our engineers possess a breadth of experience delivering projects for both central and local government. We understand the stringent requirements placed on the public sector to ensure the delivery of value and quality in a transparent manner.

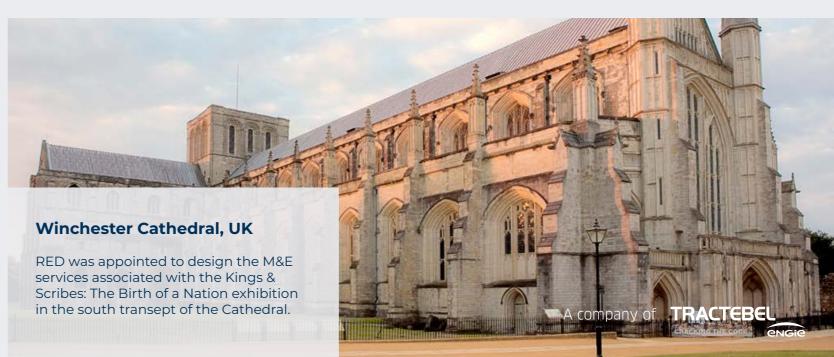
University of West England, UK



Qatar University, Qatar







LIFE SCIENCES

As global life expectancy rises, the life sciences sector's pursuit of innovative solutions and new treatments becomes increasingly vital. We provide our clients with access to subject matter experts and a skilled, experienced team dedicated to life sciences projects. Our reputation is built on designing complex projects that guarantee successful outcomes for our clients.





ATOR Mill & Process Cooling

RED managed a milling and dispensing upgrade, implementing high-tech containment and converting a cooling system for 40 reactors. Our services included Project Management, design, procurement, construction oversight, commissioning, and HAZOP reviews



Module Co, UK RED conducted de sorvicos at a now you

RED conducted design validation for MEP services at a new vaccine testing center, collaborating closely with M&E contractors. Our scope encompassed conceptual and detailed design work for the systems, followed by on-site verification during the installation and commissioning phases.



INDUSTRIAL

We have vast experience in industrial sectors like food & beverage, chemical, and process plants. Our expertise includes minimising carbon footprint, designing cleanrooms, wastewater systems, high purity water solutions, process control, utilities specification, and more. We leverage advanced engineering techniques for effective coordination and equipment integration, such as BIM, CFD modeling, Arc Flash calculations, and ATEX studies.







Replacement Steam System, Ireland



AVIATION

RED's adept aviation team, with extensive experience globally, excels in understanding key safety, operational, and sustainability drivers within the aviation sector. Our design strategies align with these drivers, and our leadership in sustainability contributes to supporting airports in their journey to net-zero through decarbonisation.







conservation supporting Gatwick Airport's journey to



HEALTHCARE

As the global population expands, the demand for healthcare services has grown tremendously, placing greater pressure on heavily scrutinised healthcare facilities. At RED, we comprehend the pressures of patient care, budgeting constraints, and aged healthcare estates. We work closely with our clients to deliver valued services, maximizing patient experience and care.











SITE SERVICES

RED provide a range of site management services including Commissioning, Verification, Validation, technical and quality assurance. We offer a practical, pragmatic, adaptable and logical approach to the technical delivery process. The RED team has diverse experience across several sectors and can therefore support clients on a range of projects within various sectors, offering a range of services. We understand the criticality of projects being delivered and documented correctly and work closely with our clients to meet their requirements and expectations.











COMPREHENSIVE SERVICES

Adapting to client needs and the evolving environmental landscape. RED's services cover the entire life cycle of any building project. Our broad capabilities save clients time, money, and effort, addressing challenges from high-performance buildings to multi-use land developments for a more sustainable world.



MEP Services

- MEP Design
- Lead Designer
- Site Services
- Client Representative
- Life Cycle Works
- Commissioning Management



Sustainability

- · Whole life Carbon assessment & reporting
- Carbon/Energy Auditing, Modelling, Part L
- Certification LEED. BREEAM. WELL+. NABERS, Greenmark
- Corporate Sustainability



Health & Safety

Strategic Consultancy

· Technical Migration and Project Management

Critical Facilities, Infrastructure Design,

Procurement and Site Services

In-Service ICT Consultancy

- · CDM Principal Designer
- CDM Advisor
- Design in Safety
- · Hazard and Operability Studies



Process Engineering

- Specialist Consultancy Services
- Specialist Expertise
- ATEX, HAZOP, Arc Flash, HV



Lifecycle Solutions

- · Identifying and implementing plant replacement works
- Carrying out Technical Due Diligence Surveys & Reports on MEP Services

DIGITAL & VIRTUAL ENGINEERING TOOLS

RED's in-house team of industry specialists excels in modelling and R&D, transforming vast information into digital tools. Our digital services and inhouse technologies pave the way for sustainable, data-driven businesses.

Digital Engineering & BIM

Integrated team of engineers, designers and BIM coordinators bringing true digitalisation of the design process together for project delivery.

Energy & Water Efficiency

RED's bespoke web-based app that provides climate and efficiency metrics for data centres across different locations and design configurations.

Carbon Reduction Analysis & Building Modelling

Dynamic thermal simulation tools to use read weather data and occupancy and internal heat gain profiles to predict thermal loads, energy and daylight performance.

CFD Modelling

Complex airflow, temperature and pressure distribution, modelled using leading CFD software in the data centre industry, 6SigmaDCX, in line with industry best practice.

BRIZA

RED's generic modelling tool for the flow of energy and water in complex process dominated building systems, including data centres.

Embodied Carbon and Whole life Carbon Analysis

RED utilises in-house tools to calculate, analyse, and consult on the whole-life carbon of building designs and refurbishments. This supports GLA, LEED, BREEAM approvals and wider carbon reporting for our clients.

Digital Twinning & Augmented Intelligence

Digital Twin and AI tools to uncover new resilient strategies, that not only help to shape the built environment but also reduce project environmental footprint.

Twinmotion

Digital Visulisation and rendering platform that allows us to bring to life in imagery and VR a variety of complex infrastructure designs.

Point Cloud

Point Cloud surveys are used to establish the exact dimensions of existing architecture, structure and services.

ACCREDITED & CERTIFIED

RED's professional accreditations and certifications demonstrate our industry expertise and commitment to excellence.

Global accreditation and qualifications. Our designs and people often achieved "first in

- Accredited Tier Designers
- Certified Data Centre Sustainability
- Professional
- Certified Data Centre Design Professional
- BREEAM Accredited Professionals & Assessors
- ESOS Lead Energy Assessor
- LEED / WELL Build Assessor
- Low Carbon Consultants and Energy Assessors

RED's work is accurate and certified benefiting both cost and programme management

- ISO 9001 | ISO 14001 | ISO 45001 | ISO 50001 | ISO 27001 Pending
- CSCS Platinum Certified
- SSIP Accredited
- PAS 91 Compliant (Constructionline)
- **Approved Safe Contractor**
- BS7858 Security Cleared Personnel
- SBTi Certification Pending





HEALTH & SAFETY

RED's team of specialist engineers provides exceptional site-related services, offering unparalleled health and safety guidance during projects. With extensive expertise, we ensure a safe and secure working environment, mitigating risks and ensuring compliance with health and safety regulations for successful project execution.

We advise and assist our clients through their construction projects to ensure that they are compliant with local Health & Safety regulations.

CDM Advisor

We provide CDM advisory services, guiding clients through the construction phase of their projects. With expertise in Construction Design and Management (CDM) regulations, we offer valuable support to ensure compliance and manage health and safety risks. Our dedicated team assists clients in navigating the complexities of construction while prioritising the well-being of their workforce. By leveraging our services, clients can confidently achieve regulatory compliance and successfully complete their projects.

CDM Principal Designer

Principal Designer services within RED are led by individuals that have extensive Project/Design Management experience and offer a hands-on approach to CDM Management.

Design in Safety

We offer comprehensive Design for Safety (DfS) assessments, which aim to proactively identify and mitigate safety and health risks associated with a project. Our assessments focus on integrating good design practices during the conceptual and planning stages, ensuring optimal risk reduction.

HAZOP Review

We provide Hazard And Operability Study (HAZOP) assessments to identify potential process controls, HSE and operational problems associated with the design, construction, maintenance or operation of a project.





PROCESS ENGINEERING

RED designs for Safety, Sustainability, and Customer Satisfaction. With 30 years of experience, RED delivers safe, sustainable, and customer-centric designs that prioritize safety, flexibility, and ergonomics, from start to finish.

Health & Safety Services

RED offer a wide range of professional services, including principle consultant roles, PSDP/ PSCS (Project Supervisor Design Process/ Project Supervisor Construction Stage), and comprehensive site support throughout the construction process. With a strong focus on health and safety, our dedicated team ensures the highest standards are met, providing excellent guidance and support to ensure a secure and compliant working environment for all stakeholders involved in the project.

Specialist Expertise

We possess extensive expertise in various areas, including pressure relief devices, process utilities, and parenteral manufacturing. Their proficiency extends to the design of critical pharmaceutical components such as vials, lyospheres, cartridges, oral solid dosage forms, and API containment systems. Additionally, they excel in the intricacies of clean room design, ensuring the creation of controlled environments that adhere to stringent industry standards.

Consultancy Services

Our comprehensive range of professional services includes front-end studies, utility studies, detailed process and piping design, control instrument and electrical design, as well as mechanical design. With a team of experts, we deliver meticulous and precise engineering solutions tailored to meet the specific needs of our clients, ensuring efficient and effective project execution from inception to completion.

Specialist Consultancy Services

We provide Hazard And Operability Study (HAZOP) studies, Safety assessment, Explosion protection, ATEX Studies, Commissioning and validation to handover, Planning, project lifecycle, piping stress analyses and environmental

MEP SERVICES

Mechanical, Electrical, and Plumbing services (MEP) are vital in complex buildings, ensuring functionality, safety, and comfort.

Integrating MEP services efficiently is crucial in complex structures for building functionality, occupant comfort, and safety. From highperformance buildings to multiple land use developments, RED applies leading-edge tools to provide innovative MEP solutions.

Building Services

Core engineering design consultancy with specific expertise from advisory, through the various stages of design, construction support and commissioning. We collaborate with clients, design teams developers and main contractors to deliver high- performance and sustainable buildings.

Lead Designer

We engage with our trusted specialist providers to provide full design duties for all disciplines including civil, structural and architectural services along with telecoms, security and local consultants. All in addition to our core MEP services.

Commissioning Management

Structured and comprehensive precommissioning and formal commissioning effort to ensure quality throughout the project.

Client Representative

Technical project management services from concept stage to handover. Supporting clients with Technical reviews, programme advice, procurement advice, progress monitoring, quality control and witness testing.

Life Cycle Works

Undertaking the site surveys, condition reports, MEP design, construction support and commissioning of plant upgrades within live facilities.

Site Services

Site services within mission critical buildings and data centre facilities. This includes due diligence audits, site investigations, SPOF analysis, condition reports and Net Zero intervention works.





ICT

RED delivers excellent ICT services by integrating enterprise technology architecture, ensuring seamless connectivity and optimised systems for today's digital landscape.

Our design standards meet growing user expectations, maintaining high service levels and information availability. We create operational networks that cater to diverse needs, from public to corporate domains. Our designs support cloud, social networking, and mobile collaboration in the digital economy.

Strategic Consultancy

Whether a building scheme or a large campus capital development project; the RED ICT consultancy team engage with the key project stakeholders to ensure that the technical architecture strategy is future-proofed to reflect the demands of today's connected economy, to delivery mobility and continuous connectivity with on-line information resources.

Critical Facilities, Infrastructure Design, Procurement and Site Services

We deliver technical excellence often in demanding project conditions. Centred upon ICT and telecommunication infrastructure; we provide a complete range of project lifecycle consultancy services from initial requirements brief through detailed 2D/3D drawings and technical design specifications to supply chain consultancy and commissioning management services.

Technical Migration & Project Management

We partner with client ICT service management teams to plan and execute the seamless migration of ICT resources to support system upgrade and premises relocation. Our professional services include project budgeting, procurement consultancy and employers representative in resident engineering and commissioning management.

In Service ICT Consultancy

Operators and investors are increasingly focussed upon continuous improvement in operational efficiency. We provide a range of resident engineering technical review services associated with converged IP data network operational performance. Project examples include technology asset audits, ICT equipment performance review, DC facilities audit, risk & resilience review, network security assessment, SLA alignment.



LIFECYCLE SOLUTIONS

The specialist services team within RED has a team of individuals that specialise in identifying and implementing plant replacement works within existing building.

Key Facts

Subject Matter Experts: Extensive design resource and R&D team with experts in key systems/equipment.

Practical approach to design: Hands-on approach to design and implementation with engineers that have practical site experience.

Safety by Design expertise: CDM experts undertake safety in design reviews as part of internal QA Technical review process.

Commissioning expertise: Commissioning experts undertake commissioning reviews on designs as part of QA Technical review process.

Dynamic implementation: Use of digital & virtual engineering tools alongside our design office in Manila ensures an efficient delivery model.

Typical scope of services includes:

- MEP design packages
- Feasibility reports
- · Condition reports
- Site validations
- Life-cycle costing studies
- Low carbon technology studies
- Plant replacement strategies

- Buildability / phasing methodology advice
- Planning / programmes
- Energy and carbon assessments
- Project risk analysis

FOCUS ON SUSTAINABILITY

RED's Sustainability Solutions & Climate Change team delivers comprehensive sustainability analysis, compliance, certification, reporting, and strategy services. Aligned with IPCC's 1.5C global temperature increase target (2032), we guide clients in adjusting project parameters for environmental resilience, flexibility, and compliance with evolving



Sustainability Audits

The first step in any client's ambitions to reduce energy & carbon. Our audits vary in scope and are tailored to provide outputs to match clients reporting needs with GRESB, CRREM, UKGBC, ISO 50001, TCFD etc formatting.



Green Energy

RED's mission is to accelerate sustainable transformation with outcomes such as zero carbon, and we have extensive experience in Green Hydrogen, Wind, Solar, Geothermal & Biomass/ Bio Fuel.



impACT Consultancy

Aligned with the RIBA Plan of work Green Overlay & BSRIA BG6, our services are tailored to provide clients with a clear understanding of their projects' environmental impact and the actions they can take to make that impact as positive as possible.



Certifications

RED offers BREEAM Advisory
Professional and consultancy services
and works with clients to develop costeffective strategies to meet planning
requirements, providing support
through to final certification. We
also offer NABERS, LEED and WELL
building standard consultancy.



Embodied Carbon – Life Cycle Assessments

Material & Equipment Embodied carbon studies including quantification and improvement studies to feed into project life cycle assessments.



Sustainability Regulation Compliance

Part L compliance. EPC assessments. ISO 50001 Planning Assessments. Planning Energy Statements. IES Modelling.





RECOGNISED BY THE INDUSTRY

RED's success can be measured by the repeat business from blue chip organisations and having won awards for our sustainable engineering and innovation, often beating off long-established competitors in the process.

IN 2024

GOLD AWARD RECOGNITION: WORKPLACE WELLBEING, MIND Index 2023/24

WINNER: YOUNG CONSULTING ENGINEER OF THE YEAR (MECHANICAL), Syeh Hafiz, ACES Awards 2024

WINNER: TOP 50 WOMEN IN ENGINEERING, Maira Bana, WE50 Awards 2024

HIGHLY COMMENDED: ELECTRICAL ENGINEER OF THE YEAR, Sarah Hussain Zahidi, Middle East MEP Awards 2024

WINNER: SIR AWARD FOR OUTSTANDING CONTRIBUTION TO STEM EDUCATION NE, Diana Kenny, STEM Hub 2024

WINNER: MOST INSPIRATIONAL NORTH EAST ENGINEERING EMPLOYER, RED Engineering Design, STEM Hub 2024

WINNER: MEP YOUNG ENGINEER OF THE YEAR, Takwa Dawdi, CIBSE UAE 2024

WINNER: MANUFACTURING ENGINEERING PROJECT OF THE YEAR, RED Ireland, Engineering Excellence Awards 2024

WINNER: MECHANICAL ENGINEER OF THE YEAR, Esteban Castro, CIBSE UAE Awards 2023

WINNER: ELECTRICAL ENGINEER OF THE YEAR, Sarah Hussain Zahidi, CIBSE Awards 2023

WINNER: HIGHLY RECOMMENDED AWARD, Roshan Patel, CIBSE Awards 2023

WINNER: YOUNG MISSION CRITICAL ENGINEER OF THE YEAR, Alex Doey, DCD Awards 2023

WINNER: EMPLOYEE WELLNESS INITIATIVE OF THE YEAR, MIDDLE East MEP Awards 2023

WINNER: YOUNG ENGINEER OF THE YEAR, Takwa Dawdi, Middle East MEP Awards 2023

WINNER: RISING STAR AWARD, Taya Williams, Women into Construction CIC 2023

And more!



KEEP IN TOUCH

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RedEngineeringDesign



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Market-leading Engineering Design consultancy specialising in the Built Environment, Data Centres, ICT and Sustainability.