



Business Company Profile

Welcome!

We are pleased to share our company introduction with you.

At Redshift Engineering, we specialize in providing comprehensive solutions for waste management, effluent treatment, and energy & resource recovery. Our expertise spans environmental engineering, project management, process design, and more.

Our dynamic team of consultants and engineers incorporates multi-disciplinary skills providing a range of management services. We have a proven track record of successfully completing development projects in Lahore and all over Pakistan .

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About Our Company

Redshift Engineering was established in 2024 with a clear objective to provide services to the urban infrastructure development sector, with project expertise from development through to operations. The company has achieved this objective and is a leading provider of integrated engineering and contracting, advisory and management services. We have the practical expertise and capacity to provide contracting services at all stages of project development.

As an independent engineering consultancy, we offer technical consulting services that align with environmental legislation. Our core team of consultants brings diverse skills and experience from a variety of projects, enabling us to successfully manage multidisciplinary endeavors.

We maintain overall responsibility for the project, even when we bring in specialist consultants for expertise not available within our own skill set. Our consulting team is strengthened by a developed network of leading experts in other environmental disciplines. This allows us to provide quality service tailored to the client's needs and the nature of the required service.

The project management team compiles world-class reports to enable informed decision-making by authorities. With experience in large projects, including those funded by agencies and public-private partnerships, the team understands the requirements for providing bankable reporting.

Welcome Message

Welcome to Red Shift Engineering!

We are committed to pioneering sustainable waste management, exceeding industry standards, and protecting the environment. Through innovation, stewardship, and resource preservation, we strive to make a positive impact on communities and the planet. Our dedicated team continuously pushes boundaries to set new benchmarks in the industry. Join us in building a cleaner, greener future!

As CEO, I am proud to lead a dedicated team committed to innovation and excellence in waste management. We continuously push boundaries to set new industry benchmarks. Explore our [website](#) to see how Red Shift Engineering is driving a sustainable future.

Thank you for choosing us as your partner in environmental preservation.

Warm Regards,

Sohaib Awan

CEO Of Company





VISION

Pioneering solutions and partnerships vital to empowering sustainability and growth within the development sector.



MISSION

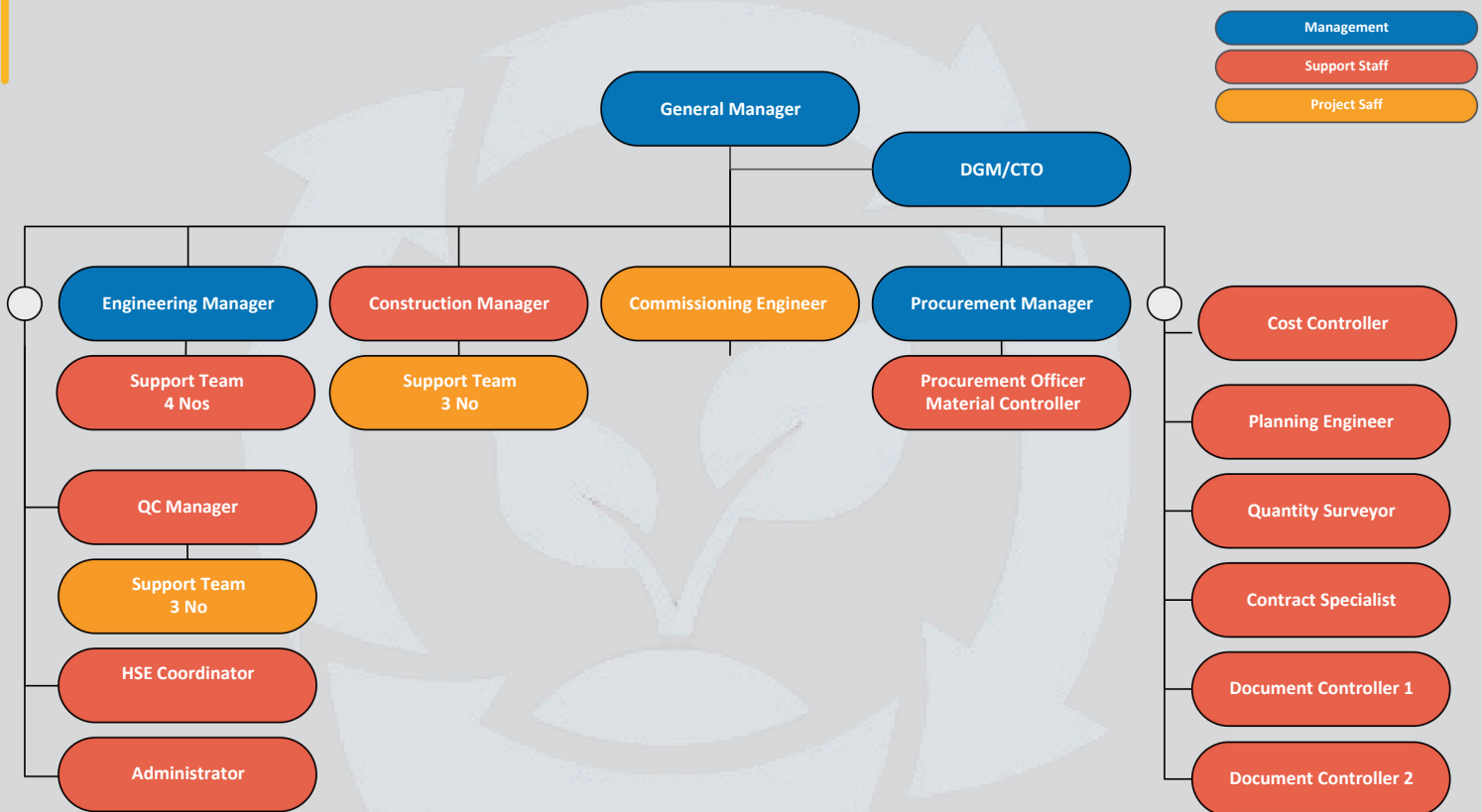
As a technology and service provider, we bridge the digital, scientific, and industrial worlds to enable a better tomorrow.



VALUES

Our core values center around environmental responsibility, client focus, and ethical conduct. These values are embedded in our approach to contracting and environmental solutions.

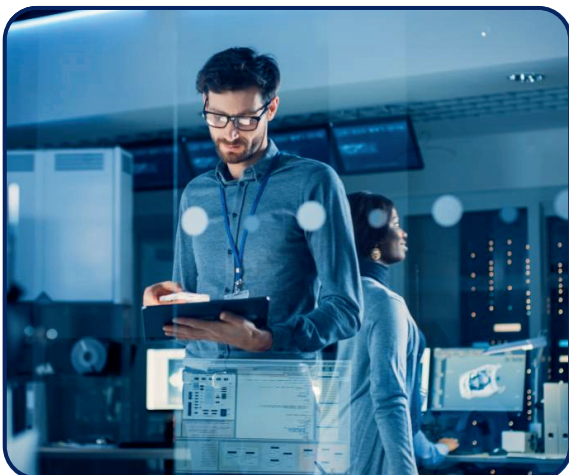
Organization Chart



Services

Engineering consultancy

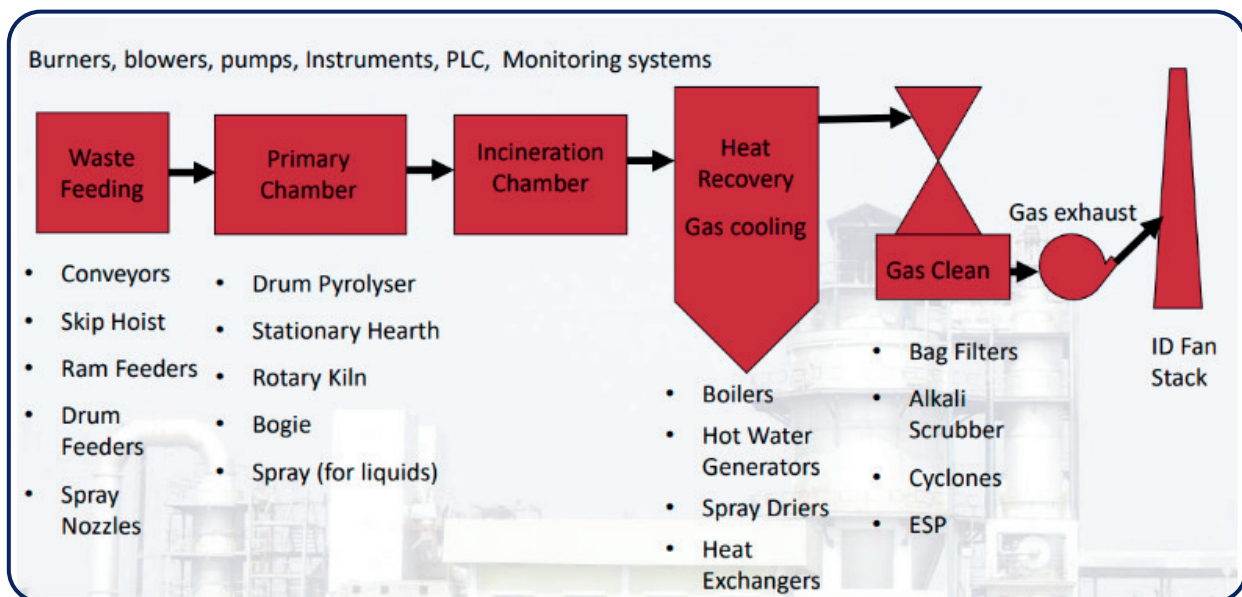
- 1.Preparation of Project FEED and pre-FEED , techno-commercial Models etc.
- 2.Technical evaluation of proposed technology
- 3.Construction supervision as 'The Engineer', As per FIDIC Red Book rules
- 4.Planning and compilation of tender documents in accordance with (PRAG) and the FIDIC Red Book
- 5.Institutional set-up of a local authorities association
- 6.Preparation of tender documents for supply and operation contracts
- 7.Managing Waste Recycling Operations through approved vendors



Incineration Systems

We provide comprehensive customized solutions for rotary kiln incinerators, following international standard quality norms. Our engineering solution encompasses a complete techno-commercial offer including Front End Engineering Design (FEED), Financial Modelling and other documentation.

Typical Incineration Treatment System and Redshift's Value proposition



- Development of mixed feed incinerators
- Energy recovery solutions (Water-tube Boiler, or Helix Expander)
- Flue gas treatment systems (Dry, Semi-dry and Wet)

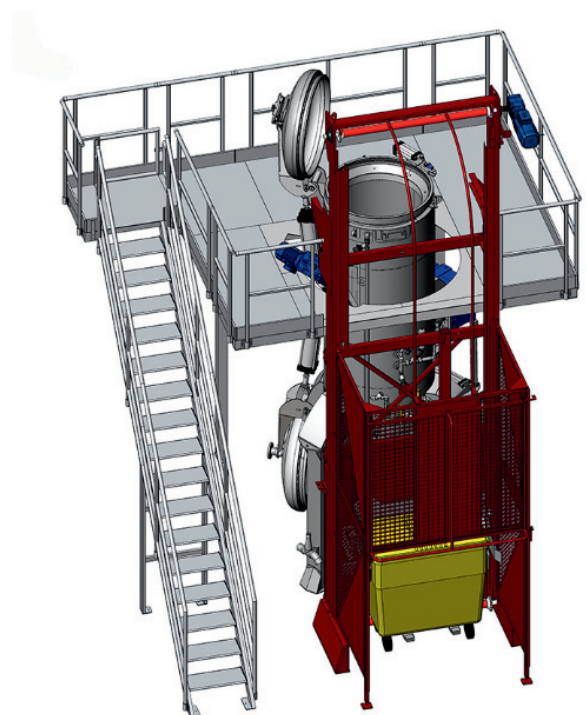
Autoclaves and Thermal Desorption systems

Redshift works with local and international vendors for thermal desorption systems.

This includes complete technical and financial analysis of the proposed unit.

For Medical & Hospital waste, Redshift's selected Autoclave process is designed to shred and sterilize infectious waste by saturated steam. Shredding and sterilization are achieved in one fully enclosed and automated, stainless steel, system with no intermediate waste handling. The contaminated waste is loaded into the upper chamber where a heavy-duty shredder reduces the waste into small pieces. Using gravity, the processed material drops into the lower treatment chamber. After shredding, waste and all the inner parts of the machine are steam heated to 138°C (280 F) and pressurized to 3,5 bar (51 psi). Sterilization is achieved by maintaining a temperature of 138°C (280 F) at the core of the waste for 10 minutes.

After the cooling process, the final product is safe to recycle or to dispose of as ordinary waste. Waste is both sterilized (Microbial inactivation = 10⁸) and volume reduced by up to 80 %. The duration of an average cycle process is fully automated and totally monitored. A computerized control system scans the process and automatically prints and records on a memory card a batch report at the end of each cycle with the essential sterilization parameters for accurate record keeping. Disinfected waste is disposed off in a scheduled landfill.



Municipal **Waste Solutions**

Redshift provides complete engineering solutions for design, engineering validation, equipment sourcing and operations support for municipal solid waste. We offer assistance for both Material Recovery Facility (MRF) and landfill solutions.

A dirty materials recovery facility processes residential or commercial trash in the hope of capturing recyclable materials that have incorrectly been thrown out as trash. When combined with clean materials recovery facilities, the benefits of dirty MRFs is that they allow for greater overall recovery of recyclable materials, whereas the downsides are that they typically cost more to run, as they require significantly more manual labor to remove trash, and any soluble recyclables, such as mixed paper and cardboard, that tend to get contaminated.

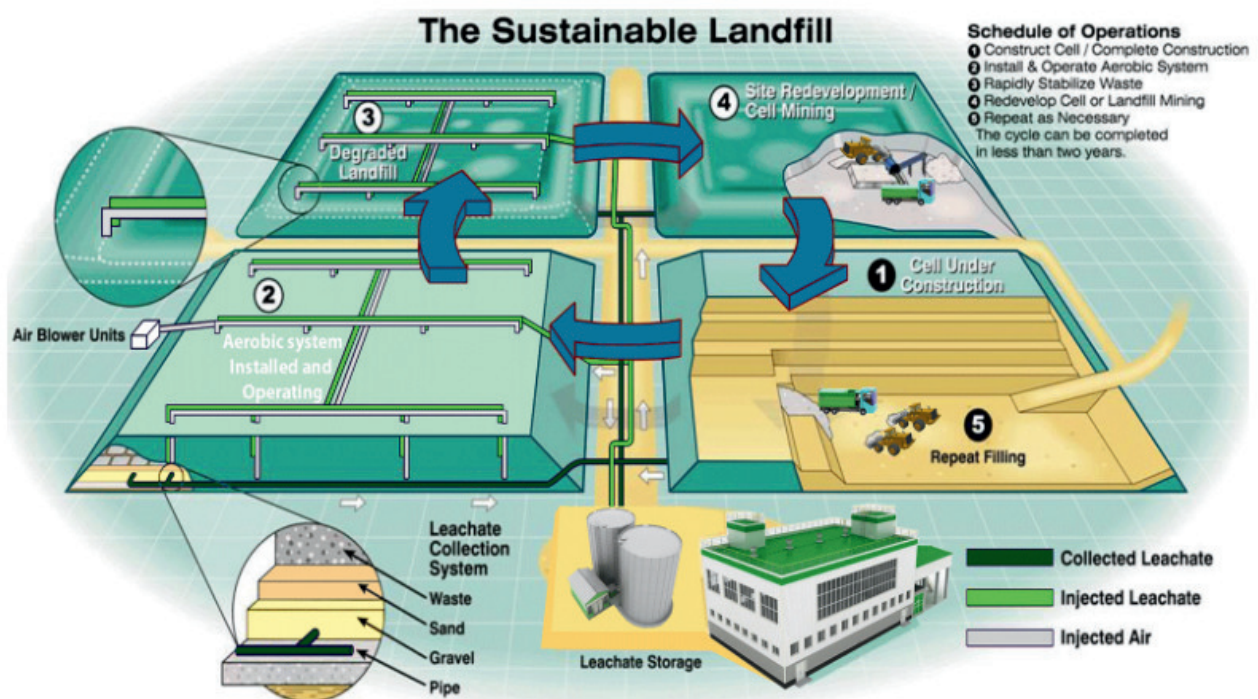
A wet MRF is essentially a dirty MRF in which water is present to separate and clean recycling streams, and in some cases, begin to biodegrade certain organics to make them ready to enter an anaerobic digestion facility.



Municipal Waste Solutions

With our partners, We possess the experienced personnel to provide a broad range of landfill engineering services and can efficiently function as an extension of a client's engineering and planning staff, providing support resources in specific areas as needed.

- Environmental characterization
- Siting and environmental clearances
- Master planning and end-use planning
- Plan of operations
- Landfill expansion, optimization, and redevelopment
- Surveying



Services

General Contracting

Our GC team consists of highly knowledgeable and experienced construction employees, who are able to deploy the right processes to address the challenges associated with large and complicated projects. Due to the implementation of sophisticated and resilient contract- and claim management, permit monitoring, schedule and supply chain management processes, Redshift Contracting is able to achieve better results in terms of efficiency and cost for the benefit of its customers. We maintain a sizable stock of critical spare parts and equipment to ensure fast response times and quality, and also to minimize production outages at our customers' operation sites.



Services & Projects

We provide comprehensive engineering solutions for waste management units, such as,

- Rotary Kiln Incinerators, Medical Waste Incinerators
- Autoclaves and Thermal Desorption Units
- E-waste and Batteries Pre-Treatment
- Solids/Sludge Management from Dairy and Textile Industries
- Skid Mounted Wastewater treatment units (UF/RO/MBR)
- Effluent Treatment Plants
- Complete management solutions for hazardous, non-hazardous and infectious



Services & Projects

ENVIRONMENTAL MANAGEMENT & CONSULTING

Pre-feasibility	Project Planning	Project Development	Project Implementation	Project Operation
- Pre-feasibility site assessment and risk evaluation - Pre-application consultation with Environmental authorities - Fatal Flaw Reporting - Strategic Environmental Assessment	- Environmental Impact Assessment (EIA) process and reporting - Environmental sensitivity analysis and mapping - Public consultation and facilitation - Environmental Management Programmes, including environmental management solutions and mitigation/risk minimising measures	- Plan and action tasks required to be completed to ensure compliance with conditions and specifications of the Environmental Authorisation and approved project EMPr - Final design environmental compliance review - Facilitate handover of compliance monitoring role to the appointed ECO for the construction phase - Public consultation and community liaison	- Transaction advisor for Financial Close - Development of site-specific Environmental Management Programmes (EMPrs) for construction and operation following the finalisation of the design for the facility - Facilitate specialist services and monitoring, including bird and bat monitoring, heritage mitigation etc. - Public consultation and community liaison	- Plan and action tasks required to be completed to ensure compliance with conditions & specifications of the Environmental Authorisation and approved project EMPr - Facilitate specialist services and monitoring - Update/amendment of project-specific EMPr - Public consultation and community liaison

ENVIRONMENTAL PERMITTING & REGULATORY REQUIREMENTS

COMPLIANCE & ASSURANCE

Project Development	Project Implementation	Project Development	Project Implementation	Project Operation
- Advice on meeting regulatory obligations and permitting requirements - Compliance advice and input for Financial Close	- Water use licensing - Waste licensing - Biodiversity permits - Heritage permits - Air Emission Licensing	- Environmental and Social Action Plan (ESAP) development - Compliance advice/auditing in terms of Equator Principles, IFC Standards and relevant Standards - Transaction advisor for environmental compliance - Due diligence assessments - Environmental and Social Due Diligence (ESG) Reporting	- Compliance advice/auditing in terms of Equator Principles, IFC Standards and relevant Standards - Full-time and ad hoc Environmental Control Officer (ECO) Services from pre-construction through to rehabilitation - Full time and ad hoc Environmental Officer (EO) Services to Contractors from pre-construction through to rehabilitation	- Auditing throughout operation as required in terms of the EIA Regulations and authority requirements - Provision of ECO for operation

Our Projects

Client : advanced disposal

“EIA,IEE and technical consultancy for sheikhupura TSDF facility”

Client : EDCO/GEMS

“Technical consultancy for private enterprises in middle east for Incineration systems and Lab Equipments”

Client : Water and Sanitation Agency (WASA)

Project Consultant : Various

“IMPROVEMENT OF WATER SUPPLY / SEWERAGE SYSTEM IN UC-249 NISHTER ZONE LAHORE.”

Kamahan

Project Budget : ~ 18 Million PKR

“IMPROVEMENT OF WATER SUPPLY / SEWERAGE SYSTEM IN UC-247 NISHTER ZONE LAHORE.”

Kahna

Project Budget : ~ 18 Million PKR

“IMPROVEMENT OF WATER SUPPLY / SEWERAGE SYSTEM IN UC-245 NISHTER ZONE LAHORE.”

Nishtar Town

Project Budget : ~ 14 Million PKR

“IMPROVEMENT OF WATER SUPPLY / SEWERAGE SYSTEM IN UC-248 NISHTER ZONE LAHORE.”

Shazwah

Project Budget : ~ 18.5 Million PKR

“IMPROVEMENT OF WATER SUPPLY / SEWERAGE SYSTEM IN UC-244 NISHTER ZONE LAHORE.”

Gajju Mata

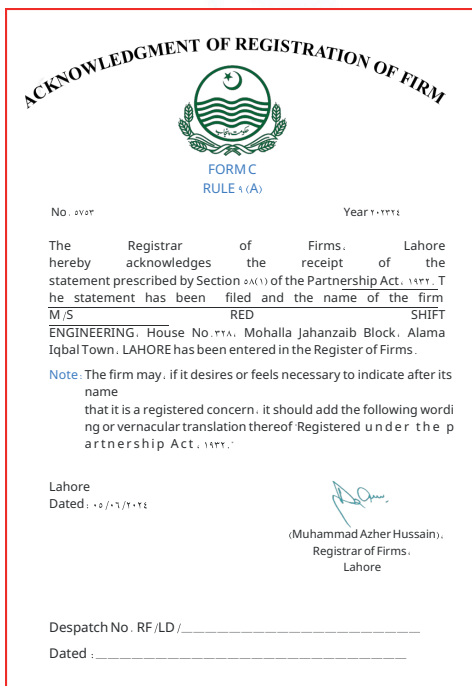
Project Budget : ~ 13.5 Million PKR

Repair and renovation of sub division office WASA Lahore

Garden Town

Project Budget : ~ 20 Million PKR

Certifications & Associations



Our Clients

Local



International



Contact Information

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