



ARMABEL GLOBAL LTD.

Innovate. Integrate. Sustain.

PROJECT PORTFOLIO

2026 Edition

A Decade of Engineering for a Greener, More Profitable Bangladesh.

60+ energy audits - 20+ MEP designs - 50+ green-financing engagements
- 50+ safety assessments delivered for leading Bangladeshi corporations
and European brand supply chains.

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About Armabel Global

Armabel Global Ltd. is a Dhaka-headquartered engineering and sustainability consultancy delivering investment-grade energy audits, decarbonization programmes, MEP design, solar EPC and industrial safety services to Bangladesh's heavy industry, export manufacturing and infrastructure sectors.

Our team carries forward more than a decade of project history originally delivered under the name Raaida Engineering. Following growing demand from corporate and international clients for a formally incorporated counterparty, we re-registered in July 2025 as Armabel Global Limited - preserving the same engineers, the same delivery standards and the same client list.

COMPANY AT A GLANCE

Founded	2025 (continuing legacy of Raaida Engineering, est. 2014)
Legal form	Private Limited Company, registered in Bangladesh
Headquarters	151 (Islam Villa), West Monipur, Mirpur-2, Dhaka-1216
Team	6 senior engineers + project pool of certified auditors
Coverage	Nationwide, with overseas advisory in Germany
Languages	English, Bangla, German (overseas desk)
Sectors	Textile/RMG, Fertilizer, Power, Ports, Commercial, Education

OUR MISSION

To lead Bangladesh's industrial transformation towards sustainability by providing world-class engineering solutions that harmonize profitability with environmental stewardship.

OUR VISION

To be South Asia's most trusted partner for industrial decarbonization - measured not only by reports filed, but by tonnes of CO2 avoided, megawatts of clean energy installed and factories made safer.



Capability Matrix

A snapshot of where our service lines intersect with the sectors we serve. Each filled cell represents a delivered engagement; darker cells indicate sustained, multi-project relationships.

Sector \ Service	Energy Audit	Green Financing	Decarb.	MEP Design	Solar EPC	Safety / HIRA
Textile / RMG	*	*	*	*	*	*
Fertilizer	*					
Power Gen.	*			*	*	
Ports & Infra.				*		
Commercial	*	*				*
Government	*		*			
Chemical / Plastic	*					

- Sustained, multi-project relationships (3+ projects)
- One or two delivered engagements

Service Notes

- All energy-audit projects follow ISO 50001 and SREDA EE&C guidelines, including measurement, verification and a documented ROI for each recommended intervention.
- Solar EPC engagements include feasibility, system design, EPC oversight, PGCB / DPDC interconnection coordination and post-handover performance monitoring.
- Decarbonization programmes are delivered with international partners (POTS GmbH, Deloitte) and align with SBTi, GHG Protocol and CSRD reporting structures.



Delivery Methodology

Every Armabel engagement runs through a four-stage delivery model. The model is intentionally simple, but the rigor at each stage is what makes our reports investment-grade.

01

DISCOVERY

Kick-off, scope freeze, data request, walk-through.

02

MEASUREMENT

On-site logging, equipment trials, sub-metering campaigns.

03

ANALYSIS

Engineering analysis, financial modelling, recommendation set.

04

HANDOVER

Investment-grade report, financing support, capacity building.

DISCOVERY - Detail

- Stakeholder mapping
- Energy / process baseline review
- Site reconnaissance & instrumentation plan

MEASUREMENT - Detail

- Power-quality & load-profile logging (24-72h)
- Boiler / chiller efficiency trials
- Compressed-air leak survey, lighting lux audit

ANALYSIS - Detail

- Energy & mass balance, Sankey diagrams
- ROI / IRR / payback per measure
- Risk-weighted prioritisation matrix

HANDOVER - Detail

- Detailed final report (BB GTF / SREDA-ready)
- Sanction-package support with lender / investor
- On-site training for plant energy team

Quality Assurance

Every report is reviewed by a SREDA-certified senior auditor before release; all numerical workings (logger files, calculation sheets, reference data) are archived for client audit and lender due-diligence.



Standards, Certifications & Codes

Our deliverables are aligned with the standards your regulators, lenders and buyers expect.

Energy & Sustainability

ISO 50001	Energy Management Systems	SREDA EE&C Rules	Designated Consumer audit framework, BD
BEEER	Bangladesh Energy Efficiency & Conservation Rules	GHG Protocol	Corporate accounting & reporting (Scope 1-3)
SBTi	Science-Based Targets for emission reduction	CSRD / ESRS	EU Corporate Sustainability Reporting Directive

Engineering & Safety

BNBC 2020	Bangladesh National Building Code	IEC 60364 / 61936	Low- & high-voltage installations
IEEE 519 / 1547	Power quality & DER interconnection	NFPA 13 / 72 / 70	Fire suppression, alarm, electrical code
ACCORD / RSC	RMG building, fire & electrical safety	ASHRAE 62.1 / 90.1	HVAC ventilation & energy efficiency

Financing & Buyer Programs

BB GTF	Bangladesh Bank Green Transformation Fund	SREUP	Sustainable & Renewable Energy Upgradation Programme
IDCOL Solar	IDCOL refinancing for rooftop & off-grid PV	OTTO Scalezero	OTTO Group decarbonization framework
KiK Green Supplier	KiK supply-chain efficiency programme	LEED	USGBC LEED v4 / v4.1 design support

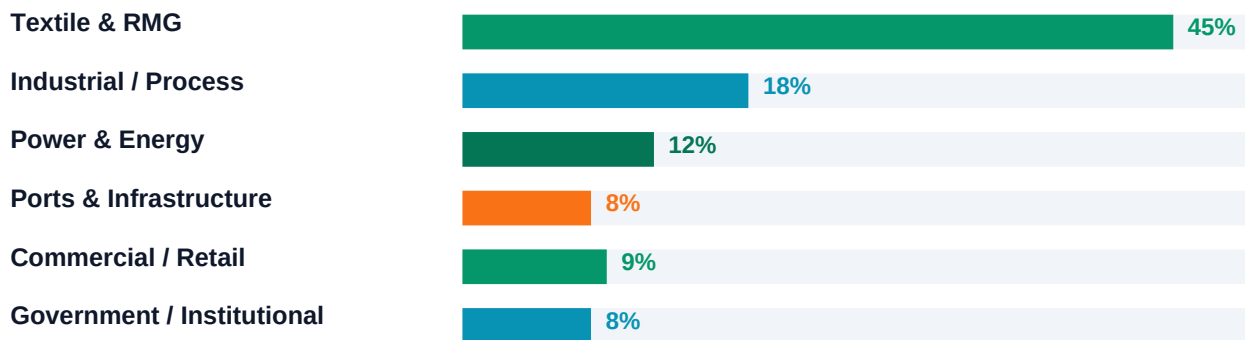


Track Record at a Glance

A consolidated dashboard of what our team has delivered since 2014 - first under Raaida Engineering, now under Armabel Global.



Project Distribution by Sector



Geographic Coverage

- Dhaka & Greater Dhaka (Gazipur, Savar, Narayanganj) - primary cluster, 60%+ of audit volume
- Chittagong (port infrastructure, refining)
- Comilla, Sylhet, Rangpur (process plants, government audits)
- Sirajganj, Pabna (utility-scale solar oversight)
- Overseas advisory desk in Germany (EU buyer compliance)



Laldia Container Terminal - Electrical & IT Systems

PROJECT PERIOD

January 2026 - Ongoing

Client: CPA / APM Terminals | Employer: EQMS Consulting Ltd. (sub-consultant of CGR, UK)

Armabel is the Lead Designer (Bangladesh) for the electrical and IT systems of one of Chittagong Port Authority's flagship container terminal expansions, working alongside an international design consortium led by CGR (UK).

33 kV

Substation
Design Voltage

12 ha

Terminal
Footprint

4

Design
Disciplines Led

Scope of Work

- Lead designer for HV/LV power distribution, lighting, earthing, lightning protection and structured cabling.
- Coordination of IT, security, telecom and operational technology backbone for terminal-wide systems.
- Quality assurance of vendor submittals; design reviews of panel boards, switchgear and fibre infrastructure.
- Technical specifications and tender documentation to international port-authority standards.

Outcomes & Deliverables

- Investor- and operator-grade design package suitable for international procurement.
- Direct interface with the UK design lead on cross-border review cycles - delivered on a weekly cadence.
- On-site Bangladesh team able to bridge international design intent with local contractor practice.



Sirajganj 68 MW Solar Power Plant

PROJECT PERIOD

May 2024 - September 2024

Owner: BCRECL | Employer: ZTENCO Limited

Independent technical review and oversight of one of Bangladesh's largest grid-tied solar PV plants, ensuring the design met BCRECL's investor obligations and PGCB's grid-code requirements before commercial operation.

68 MW

PV
Plant Capacity

100+

Inverters
Reviewed

PGCB

Grid Code
Compliance

Scope of Work

- Electrical design review of the full PV plant: array layout, string sizing, inverter specifications and AC collection.
- Approval of protection coordination, earthing and lightning protection design.
- On-site inspection of inverter stations, transformer pads, switchgear and cable trenches.
- Coordination with PGCB for synchronisation and power handover.

Outcomes & Deliverables

- Full design-review report accepted by employer and grid operator - cleared the project for energisation.
- Punch-list of safety and quality items closed before COD.
- Smooth power handover to the national grid without rework.



A R Jeans Producer Ltd. - LEED Platinum Factory

PROJECT PERIOD

2017 - 2018

Client: Fashion Globe Group | Location: Savar, Bangladesh | Certification: LEED Platinum, ACCORD-approved

Complete electrical design for what is widely recognised as Bangladesh's first LEED Platinum-certified garment factory - a flagship project that helped establish the country's reputation for high-performance, sustainable manufacturing.

40%

Energy savings
vs. baseline

50%

Water-use
reduction

LEED

Platinum
Certified

Scope of Work

- Full LV / MV electrical design including HT room, LT switchgear, busways, and cabling.
- Lighting design optimised for daylight integration and LEED EQ credits.
- Earthing, lightning protection and ACCORD-compliant safety engineering.
- Integration with rooftop solar and energy-management instrumentation.

Outcomes & Deliverables

- Bangladesh's first LEED Platinum garment factory - lighthouse case study for international buyers.
- Demonstrated that LEED Platinum is achievable in Bangladesh without compromising production economics.
- Replicable design-template later adapted for downstream factories in the same group.



OTTO Group Scalezero Supply-Chain Decarbonization

PROJECT PERIOD

May 2023 - October 2024

Programme partner: Part of the Solution GmbH (Germany) | Brand: OTTO Group | Role: Technical Lead - Bangladesh

Multi-factory decarbonization programme for OTTO Group's Bangladesh supplier base. Armabel led the technical workstream for energy and emission assessments across factories in Dhaka, Gazipur, Savar and Narayanganj, then trained plant teams to sustain the gains.

15+

Supplier
Factories

4

Industrial
Clusters Covered

25%

Avg. emission
reduction modelled

Scope of Work

- Energy and GHG baseline assessment for each factory using GHG Protocol Scope 1 & 2 boundaries.
- Identification of cost-effective decarbonization measures ranked by abatement cost.
- Capacity-building workshops with plant energy managers.
- Investment-grade reporting against OTTO Group's Scalezero framework.

Outcomes & Deliverables

- Avoided-emission roadmap accepted by OTTO Group sustainability team.
- Improved supplier ratings on the brand's sustainability scorecard.
- Sustained capability inside factories - measures continued after Armabel's exit.



Energy Audit Project Index

A consolidated index of energy audits delivered since 2020 - first under Raaida Engineering, then under Armabel Global. All projects followed ISO 50001 and SREDA EE&C guidelines.

Client	Objective	Date
FY 2026 (under Armabel Global Ltd.)		
Wash Point Limited	Energy Audit (Equipment Financing)	Jan 2026
Basundhara City Shopping Complex	SREDA Designated Consumer Audit	Feb 2026
KAFCO (Fertilizer)	SREDA DC Compliance Energy Audit	Ongoing
Jalal Ahmed Spinning Mills	SREDA DC Compliance Energy Audit	Ongoing
FY 2025		
Shajinaz Eximpack Ltd.	KGDCL Compliance Energy Audit	Aug 2025
S M Plastic / Yunusco T&A	KGDCL Compliance Energy Audit	Jul 2025
Brothers Fashion Ltd.	Energy Audit (Equipment Financing)	Jun 2025
Sterling Apparels Ltd.	Boiler Plant Energy Audit	May 2025
Talha Fabrics Ltd.	SREDA DC Compliance Energy Audit	Mar 2025
Jeans and Polo Ltd.	SREDA DC Compliance Energy Audit	Feb 2025
FY 2024 (under Raaida Engineering)		
Noman Terry Towel Mills	Detailed Energy Audit	Jul 2024
AFCCCL (Fertilizer)	Detailed Energy Audit (SREDA & GIZ)	May 2024
South East Textiles (Pvt.)	Detailed Energy Audit	May 2024
Asia Knit Composite (2 plants)	Energy Audit for Solar Financing	May 2024
DC Office, Rangpur	Detailed Energy Audit	Mar 2024
Echotex Ltd.	Energy Audit & Solar Financing	Mar 2024
Newtex Knit Fashions	Energy Audit (Solar Financing)	Mar 2024
Ananta Jeanswear / Garments	Energy Audit & Solar Financing	Jan 2024



Energy Audit Index (continued)

Client	Objective	Date
FY 2023		
Pacific Blue (Jeans Wear)	Energy Audit (Equipment Financing)	Oct 2023
Knit Concern Ltd.	Energy Audit (Solar Financing)	Aug 2023
DBL Composite Ltd.	Detailed Energy Audit	Jun 2023
Team Group Spinning	Boiler Energy Audit	Apr 2023
Mondol Fabrics Ltd.	Energy Audit (Equipment Financing)	Feb 2023
FY 2020 - 2022		
Ananta Group (Garments)	Detailed Energy Audit	2022
DBL Group (Multiple plants)	Detailed Energy Audit	2022
Echotex Ltd. (initial)	Detailed Energy Audit	2021
Sterling Group	Detailed Energy Audit	2021
Fashion Globe Group	Energy Audit & Optimisation	2020
International-partner audits (POTS GmbH, 3R Environmental, KiK)		
Mixed RMG cluster - Dhaka (12 sites)	Decarbonization assessment	2022 - 2024
Mixed RMG cluster - Gazipur (10 sites)	Decarbonization assessment	2022 - 2024
Mixed RMG cluster - Savar (8 sites)	Decarbonization assessment	2021 - 2023

Note: international-partner audit clusters cover individual factories that cannot be named here for confidentiality. Full engagement details available under NDA on request.



MEP & Infrastructure Project Index

Selected MEP, electrical and infrastructure design engagements - from port substations to LEED-platinum factories and institutional campuses.

Laldia Container Terminal <i>CPA / APM Terminals via EQMS / CGR (UK)</i> Lead Designer (BD) for electrical & IT systems.	2026
Chittagong Bay Terminal <i>Chittagong Port Authority</i> 132 / 11 kV substation, distribution, lighting, earthing, lightning protection, tender package.	2022 - 23
Sirajganj 68 MW Solar Plant <i>BCRECL via ZTENCO Ltd.</i> Electrical design review, PV system approval, PGCB synchronisation.	2024
A R Jeans Producer Ltd. <i>Fashion Globe Group, Savar</i> Bangladesh's first LEED Platinum garment factory - complete electrical design.	2017 - 18
Padma Oil Company Ltd. <i>Padma Oil Company</i> MEP design for office and ancillary facilities.	2017 - 18
AB Bank Limited - Gulshan <i>AB Bank Limited</i> MEP design for branch / corporate fit-out.	2020
Delhi Public Schools - DPS-3 <i>DPS Bangladesh</i> MEP design for institutional campus.	2018 - 19
ULAB Campus - Block D <i>University of Liberal Arts Bangladesh</i> MEP design for academic block.	2018 - 19
Kazi Polymer Industries <i>Kazi Polymer</i> MEP design and energy systems for manufacturing facility.	2020
Talha Fabrics - Boiler & Utility <i>Talha Group</i> Boiler-house and utility electrical retrofit study.	2024



Sustainability & Policy Engagements

Strengthening Regulatory Framework for EE&C

Jul 2024 - Present

IDCOL & SREDA | Employer: Deloitte Touche Tohmatsu India LLP

Role: Technical Expert

Supporting SREDA in developing regulatory implementation frameworks for energy efficiency, advising on impact indicators, and strengthening enforcement of energy audit regulations. Includes drafting consultation papers and reviewing Designated Consumer obligations.

OTTO Group - Scalezero Supply-Chain Decarbonization

May 2023 - Oct 2024

Part of the Solution GmbH, Germany

Role: Technical Lead - Bangladesh

Led the technical workstream covering 15+ supplier factories across Dhaka, Gazipur, Savar and Narayanganj. Delivered GHG-Protocol-aligned baselines, decarbonization roadmaps and factory-level capacity-building workshops.

KiK Green Supplier Programme

Nov 2021 - Oct 2022

Part of the Solution GmbH & Eclectic Ltd.

Role: Technical Lead - BD

Led industrial energy / emission assessment teams across the KiK supplier base, trained partner factories and supported implementation of efficiency measures throughout the textile supply chain.

POTS GmbH - Multi-Brand Decarbonization

2020 - 2024

POTS GmbH, Germany

Role: Local Audit Partner

Conducted 30+ energy and decarbonization audits for European buyer programmes across Dhaka, Gazipur and Savar industrial clusters - feeding into brand-level Scope 3 inventories.



Notable Clients & Sectors Served

A representative selection of clients across textile, industrial, infrastructure, government and education sectors. Many engagements continue across multiple years and project lines.

Textile & RMG

- Ananta Group
- DBL Group
- Echotex Ltd.
- Team Group
- Fashion Globe Group
- Sterling Apparels
- Brothers Fashion
- Pacific Blue
- Newtex Knit
- Asia Knit Composite
- Noman Terry Towel Mills
- Mondol Fabrics
- Knit Concern Ltd.

Power, Ports & Infrastructure

- Chittagong Port Authority
- BCRECL
- ZTENCO Limited
- EQMS Consulting Ltd.
- CGR (UK) - design partner
- PGCB (interface)

Education & Finance

- ULAB
- Delhi Public Schools (DPS-3)
- AB Bank Limited

International Brands & Programmes

- OTTO Group (Germany)
- KiK Supply Chains
- POTS GmbH (Germany)
- European Buyer Programmes
- Deloitte (regulatory)

Industrial & Commercial

- Basundhara City
- Wash Point Limited
- Shajinaz Eximpack
- S M Plastic Industries
- Padma Oil Company
- Kazi Polymer
- Talha Fabrics

Government & Institutions

- SREDA
- IDCOL
- BEZA
- DC Office Rangpur
- BTCL
- Civil Aviation Authority
- Military Engineer Services



Team & Leadership

Six senior engineers anchor Armabel Global - covering electrical, mechanical, chemical-process, policy and overseas advisory. Together they bring more than 60 person-years of investment-grade engineering experience.

Rubel Mahmud

Managing Director & Lead Energy Auditor

Education: M.Sc. EEE, BUET (2023) - B.Sc. EEE, AIUB (2014)

Certifications: SREDA Certified Energy Auditor - Member, IEB - Certified Electrical Supervisor A/B/C

Founder of Raaida Engineering (now Armabel Global). 12+ years of investment-grade audit and design leadership; Lead Designer for the Laldia Container Terminal; Technical Expert with Deloitte for SREDA / IDCOL.

Toufiq Rahman

Senior Energy Consultant & Policy Expert

Education: B.Sc. Mechanical Eng., BUET

Certifications: SREDA Certified Energy Auditor - Asst. Director, SREDA

Dual-track expert combining industrial energy auditing with national policy formulation. Shaped landmark BD policies (BEEER, S&L Regulation, EE&C Master Plan 2030). COP29 delegate.

Md. Reazul Haque

Senior Energy Auditor - Chemical & Process

Education: B.Sc. Chemical Eng., BUET (2012) - M.Sc. Nuclear Eng., DU (2018)

Certifications: SREDA Certified Energy Auditor

Decade at Petrobangla's Sylhet Gas Fields; condensate, ammonia and 24 MW captive-power commissioning experience. DCS / SCADA expertise (Honeywell, Schneider).



Affiliations & Memberships

Professional Bodies

IEB	Institution of Engineers, Bangladesh
BSME	Bangladesh Society of Mechanical Engineers
IEEE	Institute of Electrical and Electronics Engineers

Government & Regulator Engagements

SREDA	Sustainable & Renewable Energy Development Authority - Certified auditors and policy advisory
IDCOL	Infrastructure Development Company - Joint regulatory framework support with Deloitte
BEEER	Contributing experts to the Bangladesh Energy Efficiency & Conservation Rules

International Programmes

OTTO Group Scalezero	Programme partner via Part of the Solution GmbH
KiK Supply Chain	Green Supplier Programme partner
POTS GmbH	Multi-brand decarbonization audit partner
GIZ	Joint detailed audit at AFCCL with SREDA & GIZ

Buyer / Brand Compliance Programs

ACCORD / RSC	RMG building, fire and electrical safety
LEED	USGBC LEED v4 / v4.1 design support
CSRD / ESRS	EU Corporate Sustainability Reporting



Client Voices

Selected client feedback from recent engagements. Full reference letters available on request.

"The audit report was the most actionable we had received in years - every measure was costed, sequenced and ready for our CFO to take to the bank."

- Plant Director, Tier-1 RMG manufacturer

"Armabel's on-site team bridged the gap between our international design lead and our Bangladeshi contractors cleanly - we lost no time on review cycles."

- Project Manager, Port infrastructure programme

"Their decarbonization assessment fed directly into our brand sustainability scorecard and improved our supplier rating."

- Sustainability Lead, European apparel brand

"They were the only consultant who turned the SREDA DC compliance process into something our facility team could actually run."

- GM (Engineering), Designated-Consumer industrial site



Let's Build a Sustainable Future Together.

Whether you need an investment-grade energy audit, a decarbonization roadmap, a turnkey solar plant or LEED-grade MEP design - our team is ready.

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Saturday - Thursday: 9:00 AM - 6:00 PM | Friday: Closed

Engagement Models

- Project-based (audit / design / EPC oversight)
- Retainer (multi-site sustainability programme)
- Embedded technical advisor (long-term partnership)