

Rawabi Electric Pre-Qualification Profile

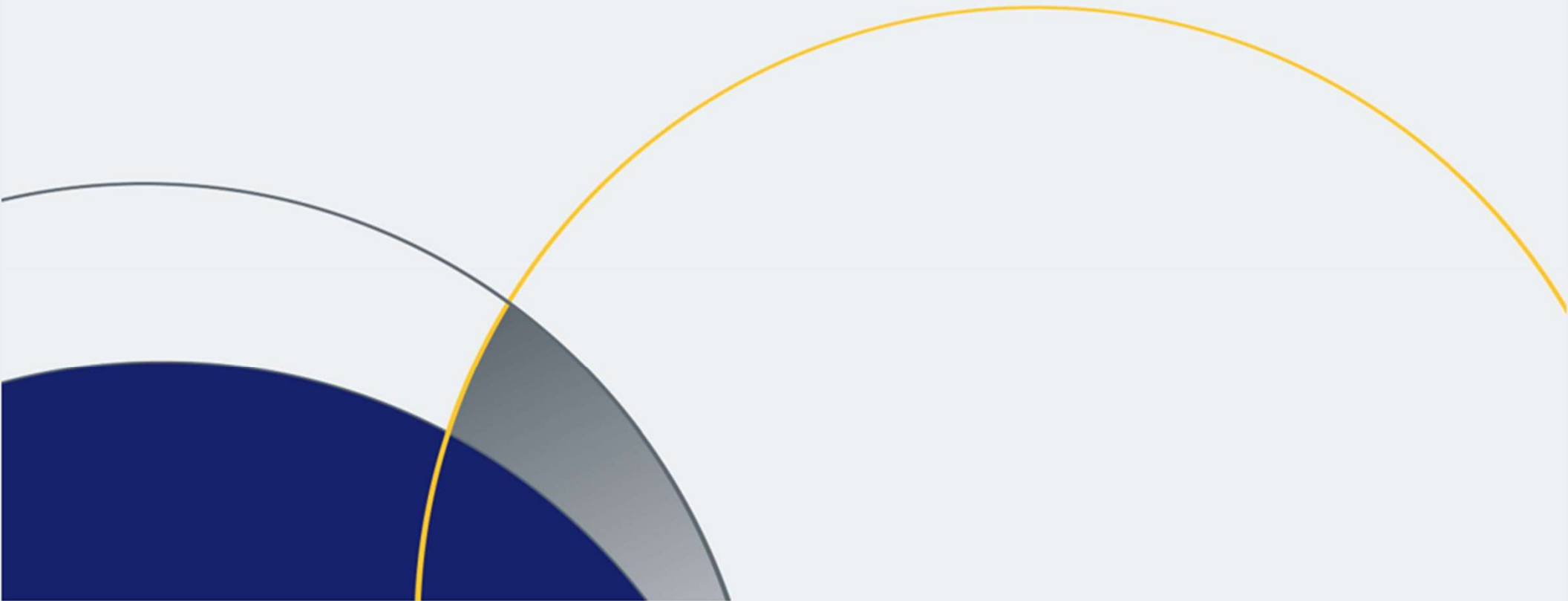


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Introduction

- Rawabi Electric Co. Ltd. is a fully owned subsidiary of Rawabi Holding
- founded in 1982 as Remal Electric
- A leading provider of power and automation solutions in Saudi Arabia and the GCC to various sectors for over 38 years



Introduction

Vision

Our vision is to be the leading regional provider of power and automation products and services to a diversified range of key industries, and by doing so to contribute to the economic development and quality of life in the countries where we operate.

Our Mission

We will achieve our vision through organic development and strategic partnerships, with long-term commitment to provide:

- Strong technical expertise
- Superior quality products and services
- A solid network of business relationships
- A rewarding and professional work environment

Our Values

In all we do, we will uphold our core values:

- Integrity
- Customer Focus
- Professionalism
- People Development
- Corporate Social Responsibility

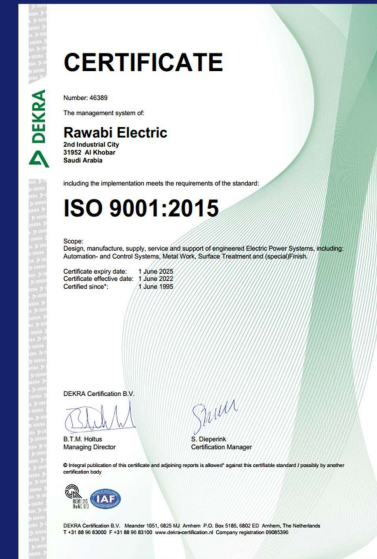


هيئة المحتوى المحلي
والمشتريات الحكومية
Local Content & Government
Procurement Authority



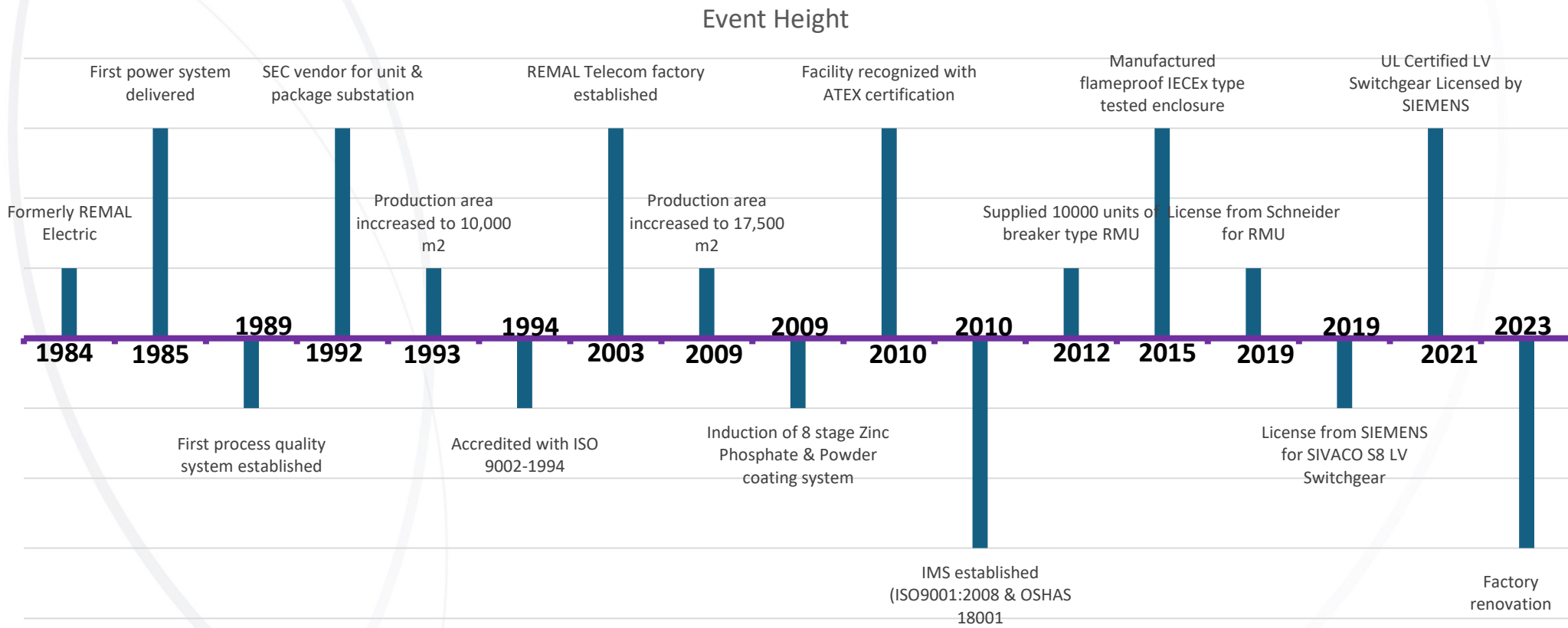
Safety First, Quality Always

- We are certified by DEKRA of Germany for IMS (Integrated Management System) comprising:
 - ✓ **ISO 9001:2015** - for quality
 - ✓ **ISO/IEC 80079-34** - for increased safety in potentially explosive atmosphere and products manufacturing
 - ✓ **ISO 45001:2018** - for occupational health and safety
 - ✓ **ISO 14001:2015** - for environmental performance
- Our products in turn, are mostly third-party tested and listed at reputed international labs like KEMA and UL. Samples are regularly verified and retested by certifying bodies; thus ensuring sustainable product safety and integrity.



OUR JOURNEY

Our Journey (1984 – onwards)





OUR PARTNERS & APPROVALS

Partners of Success (Part 1 of 4)

 <p>الشركة السعودية للكهرباء Saudi Electricity Company</p>	 <p>سابك عندنا</p>	 <p>أرامكو السعودية saudi aramco</p>
Saudi Electricity Company	Sabic	Saudi Aramco
 <p><i>L&T Hydrocarbon Engineering</i></p>	 <p>SNC • LAVALIN</p>	 <p>SAIPEM</p>
Larsen & Toubro Hydrocarbon Engineering	Saudi Arabian Kentz - SNC Lavallen	Saudi Arabian Saipem
 <p>TECNICAS REUNIDAS</p>		 <p>Petrofac</p>
Tecnicas Reunidas	General Electric International	Petrofac
 <p>روابي للنفط والغاز & Gas</p>	 <p>Gulf Steel Works الخليج للأعمال الحديدية</p>	 <p>YOKOGAWA</p>
Rawabi Oil & Gas	Gulf Steel Works	Yokogawa

Partners of Success (Part 2 of 4)

 LARSEN & TOUBRO	 PETRONASH Creating Value for Operators	SIEMENS
Larsen & Toubro Saudi Arabia	Petronash	Siemens Saudi Arabia
 شركة الزامل للصناعات المعدنية الثقيلة AL ZAMIL HEAVY INDUSTRIES LTD.	 AES AES ARABIA LTD Environmental & Process Engineering	 Babtain Contracting Company الباطين للمقاولات
Al Zamil Heavy Industries	AES Arabia	Al-Babtain Contracting Co.
 TEKFEN TEKFEN CONSTRUCTION	Nesma  نسما & Partners وشركاهم	 NPCC شركة البنية التحتية البترولية الوطنية
Tekfen Construction	Nesma & Partners Contracting	National Petroleum Construction Co.
 KAD	شركة كوجيلكس COGELEX	 CHINA PETROLEUM PIPELINES ENGINEERING CO., LTD.
Saudi Kad Contracting	Cogelex – GE	China Petroleum Pipelines Engineering

Partners of Success (Part 3 of 4)

 <p>中国地质工程集团公司 CHINA GEO-ENGINEERING CORPORATION</p>	 <p>شركة إتحاد المقاولون الفليبينية GULF CONSOLIDATED CONTRACTORS CO.</p>	 <p>الكفاح للمقاولان ALKIFAH CONTRACTING</p>
<p>China Geo-Engineering Corporation</p>	<p>Gulf Consolidated Contractors</p>	<p>Al Kifah Contracting</p>
 <p>مركز تجهيز حقول النفط المحدود Oilfields Supply Center Ltd.</p>	 <p>PETROSERVE INTERNATIONAL</p>	 <p>الزامل للحديد ZAMIL STEEL</p>
<p>Oil Fields Supply Center Ltd.</p>	<p>PetroServe International (PSI)</p>	<p>Zamil Process Equipment</p>
 <p>GENERAL DYNAMICS IS&T Arabia</p>	 <p>USSG Energy Insight</p>	 <p>المير ALMEER</p>
<p>General Dynamics IS&T Arabia</p>	<p>USSG Energy Insight</p>	<p>Almeer Saudi Technical Services</p>
 <p>ORMAZABAL velatia</p>	 <p>HYUNDAI HEAVY INDUSTRIES CO.,LTD.</p>	 <p>ABB</p>
<p>Ormazabal</p>	<p>Hyundai Heavy Industries</p>	<p>ABB Saudi Arabia</p>

Partners of Success (Part 4 of 4)

		
<p>MIS Arabia</p>	<p>Al-Mashariq Company for Trading & Contracting</p>	<p>JGC Corporation</p>
		
<p>John Zink Hamworthy Combustion</p>	<p>ENPPI</p>	<p>Al Robaya Holding Co.</p>
		
<p>BR. C.A.T. International</p>	<p>Daewoo E&C</p>	<p>Saudi Services for Electro Mechanic Works</p>
		
<p>SK Engineering & Construction</p>		<p>Gas Arabian Services</p>

Partners of Success

Approved Materials Supply List for Saudi ARAMCO (Vendor-10013570)

9 COM	Description	9 COM	Description
6000000794	Box; Electrical; Junction; Aluminum; Steel	6000000859	Panel Board; Low Voltage, Non-Xproof
6000000738	Bus	6000017060	Unit; main Ring, 13,8KV
6000000796	Box; Electrical; Terminal	6000002697	Panel; Control; Indoor
6000000846	Enclosure; Circuit breaker	6000013922	System Cabinets
6000000890	Starter; Electrical Motor	6000000898	Controlgear, Indoor LV
6000000862	Switch; Push Button	6000016361	Cabinets : DCS Systems
6000000830	Box; Junction; Explosion Proof	6000000886	Switchrack Outdoor Low voltage
6000001334	Building, Active/Passive Cooling Shelter	6000002698	Panel; Control; Instrument; Outdoor
6000000845	Control and Protective Relay Panel	6000000885	Switchgear, Metal Enclosed Low Voltage
6000016420	Cabinet : For CCS	6000010720	Unit Prefabricated Substation

Technology Partners

		
Siemens	Eaton	Schneider Electric
		
Emerson Electric Co.		Phoenix Contact

Certification Partners

		
Dekra	Bureau Veritas	UL
		
IECEX		Centro Elettrotecnico Sperimentale Italiano

**ENGINEERING
CAPABILITY**










**R & D
CAPABILITY**

**OUR PLANT
CAPABILITY**

Engineering Capability

We at Rawabi Electric offer professional in-house design through all aspects of engineering including Mechanical, Electrical, Control & Automation.

Our qualified engineers and designers have an array of expertise delivering proven results from design software and tools.

SOFTWARE			
 EPLAN	Electric schematic, wiring diagrams	 AUTOCAD	General arrangement and layout
 SOLIDWORKS	Fabrication drawings	 DIALUX	Lighting calculation
 STAADPRO	Structural calculation	 ELITE SOFTWARE	HVAC calculation
 EATON CONFIGURATOR X-ENERGY		 SIEMENS SIMARIS	 SCHNEIDER ELECTRICAL POWER BUILD

Our Plant Capability

Rawabi Electric is equipped with state-of-the-art machinery and equipment

BUILDING @ RAWABI ELECTRIC	COVERED AREA (M ²)	TOTAL AREA (M ²)
1. Electrical Plant	7,200	10,000
2. Mechanical Plant	4,350	7,124
3. RSE Plant	3,200	5,000
4. New Plant	1,540	5,000
Total (in M²)	16,290	27,124

Our R&D Capability

- Contributes to the success and sustainability of REC business
- Provides a platform for creativity and innovation to flourish in our organization
- Helps REC to have a competitive edge over its competitors
- Foster its growth by developing new competitive and lucrative solutions
- Fulfills REC vision of localizing latest technologies

Our Plant & Capability



PRODUCTS & SERVICES

- **Power Systems**
- **Automation and Control Systems**
- **Metal Work and Finish**
- **Pre-fabricated Buildings and Steel Structures**
- **Cold Store Products**
- **Services and Support**

Power Systems - Low Voltage Systems



Low Voltage Switchboard



Main Distribution Board



Junction Box/ Distribution



Fenced NEMA-4X Switchrack



Switch Rack for Classified Areas

Power Systems - Medium Voltage Systems

- Switchgears up to 7000A, 40.5 kV, 63KA (Air Insulated, GIS, Arc Proof, Metal Clad, ARC furnace, Double Bus bar systems), in accordance to IEC62271-200
- Motor Control for loads up to 40,000 KW, 17.5 kV, 31.5KA, in accordance with IEC62271 and IEC60470
- Compact and Secondary Substations (open and closed types)
- RMU and Metering Units (fixed and extensible types) up to 36 kV
- Mobile and Portable Power Centers (MPC and PPC)



Outdoor 13.8 kV RMU



Smart (Automated) 13.8 kV RMU



- Turn-key Process Control Systems (on MAC basis), from base design to engineering, System Integration, MIS, Staging, IFAT, ISAT
- World Class Staging & IFAT facility
- SCADA/PLC/RTU; Engineering, System Integration, Staging & IFAT
- Gen Set CONTROL; Auto Synchronizing, Load Management & Control
- AC/DC Control Systems
- Instrumentation and Control Boxes (ATEX certified), Cabinets & Shelters
- Protection & Control (Relays, SCADA, PMS, Programming & Software)

Metal Works and Finishing



Prefabricated Buildings and Structures

Control Shelter



E-House



Control Shelter



Telecom Shelter

Prefabricated Buildings and Structures



Modular Cold Room

- Chiller Room
- Freezer Room
- Blast Freezers
- Clean Rooms
- Food Processing Rooms
- Ripening Chambers
- Custom Display Rooms

Insulated Doors

High Performance Insulated Door Systems for Cold Store applications:

- Overlap / Flush Hinged Door
- Flip Flap Door
- Service Door
- Sliding Door
- Overhead Sectional Door



Overlap Hinged Door



Service Door



Truck Bodies



We commit to provide comprehensive aftersales services including the supply of spare parts to our supplied and manufactured products during their lifecycle which varies from minimum 10 year up to 25 years, depending on the product type.

Services:

- ✓ Installation, Testing, Commissioning (Site Services)
- ✓ ICE Service Maintenance Contracts (Asset Management)
- ✓ Automation and Optimization Solutions
- ✓ Training & Consultation
- ✓ Engineering, System Design, & CAD Services
- ✓ Retrofit Solutions
- ✓ System Integration Services



Future Product Development



SMART METERS

Manufacturing / Assembling of Smart Meters

To Establish an Assembly/Manufacturing for the production of Smart Meters for SEC (WC100A & WC160A Meters)

Market Demand for next five years in KSA:

Meter, ESERV CT-VT - 312,708

Meter, ESERV, DIG 160A - 308,426

Meter, ESERV, DIG 100A - 3,593,287

In addition to the above regular demand, SEC have 300,000 CT meter requirement for Transformer Monitoring Project. (Source : SEC)

Road map:

- ✓ Technology partner with reputed brand
- ✓ Assembly / Manufacturing setup
- ✓ Fully integrated and factory tested
- ✓ Inhouse branding w/type test

Business Plan:

- ✓ Revenue of 25MSAR
- ✓ Investment of 2MSAR
- ✓ ROI - less than 2 Years
- ✓ Profit of 15-17%



MEDIUM VOLTAGE SWITCHGEAR

Manufacturing / Assembling of MV Switchgear

To Establish an Assembly/Manufacturing for the production of MV Switchgear for Oil & Gas Segment and Infrastructure Segment

Product Features:

Metal Clad Switchgear with Vacuum Circuit Breaker

Gas insulated Switchgear Cubicle

Meets IEC 62271-200 and GB 3906 standards

3.3 to 40.5KV/ 630A to 4000A

25kA to 50kA/ IAC AFLR 40kA/1Sec

Road map:

- ✓ Technology partner with reputed brand
- ✓ Assembly / Manufacturing setup
- ✓ Fully integrated and factory tested
- ✓ Localizing w/ fully type test

Business Plan:

- ✓ Revenue of 35MSAR
- ✓ Investment of 3MSAR
- ✓ ROI - less than 2 Years
- ✓ Profit of 10-12%

Future Product Development

3500K - Reading Room

2700K - Bedroom

3000K - Kitchen Island



5 years
warranty



IC



ETL



24H
On Line

Indoor & Outdoor Lighting

Assembling of LED Lighting and Exe. Proof Lighting fixtures

To Establish an Assembly/Manufacturing for the production of Exe. Proof lighting fixtures for Oil & Gas Segment and LED lighting fixtures for Residential and Infrastructure Segment

Product Features:

Slim down light lighting fixtures

Die-cast Aluminum down light lighting fixtures

LED Exe-Proof Lighting

Industrial Lighting

Road map:

- ✓ Technology partner with reputed brand and assembly for a brand
- ✓ Assembly / Manufacturing setup
- ✓ Fully integrated and factory tested
- ✓ Localizing w/ SASO certified

Business Plan:

- ✓ Revenue of 15-20MSAR
- ✓ Investment of 1.5MSAR
- ✓ ROI - 1.5 Years
- ✓ Profit of 10-12%



SPECIAL TRANSFORMERS

Manufacturing / Assembling of Special Transformers

To Establish an Assembly/Manufacturing for the production of Transformers for Oil & Gas segment

Product Features:

Distribution Transformer upto 4000KVA

6.3KV to 33KV Series Distribution Transformer

Special Transformers

CSP (Completely Self Protected) Transformer

Isolation Transformer

Road map:

- ✓ Technology partner with reputed brand
- ✓ Assembly / Manufacturing setup
- ✓ Fully integrated and factory tested
- ✓ Inhouse branding w/type test

Business Plan:

- ✓ Revenue of 100MSAR
- ✓ Investment of 30MSAR
- ✓ ROI - less than 3-5 Years
- ✓ Profit of 10-12%



Renewable & Sustainable Energy

Manufacturing of Renewable Energy Product

To develop and manufacture Solar Energy Products for the Infrastructure & Utility segment in the Kingdom of Saudi Arabia and in Middle East & Africa. Commitment to the environment friendly & Sustainable energy

Product: Solar Street Light & Solar Systems

Product Features:

- ✓ Gel Battery Solar Street Lights (30 - 200W)
- ✓ 150W - 200W High Power All-in-one integrated solar street light

Product: Photovoltaic Inverters

Product Features:

- ✓ String Inverters
- ✓ Central Inverters
- ✓ Energy Storage Systems
- ✓ Monitoring Systems

Business Plan:

- ✓ Revenue of 20MSAR
- ✓ Investment of 2MSAR
- ✓ Profit of 25%



Customized Products for O&G

Manufacturing of Special Product

To develop and manufacture special customized products for the Oil & Gas segment

Product: Mudfork System

Product Features:

- ✓ Study the viscosity and density of drilling fluids
- ✓ Electronic sensors
- ✓ IECEx certified intrinsically safe for Ex ia IIB T4
- ✓ Modbus RTU protocol via RS485

Road map:

- ✓ Product by R & D
- ✓ Coordination with ARAMCO R&D
- ✓ Develop the prototype
- ✓ Trial order and product enhancement in 2-3 years
- ✓ Commercialize after 3rd year

Business Plan:

- ✓ Revenue of 25MSAR
- ✓ Investment of 2MSAR
- ✓ Profit of 25%

Contact Details

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Thank you