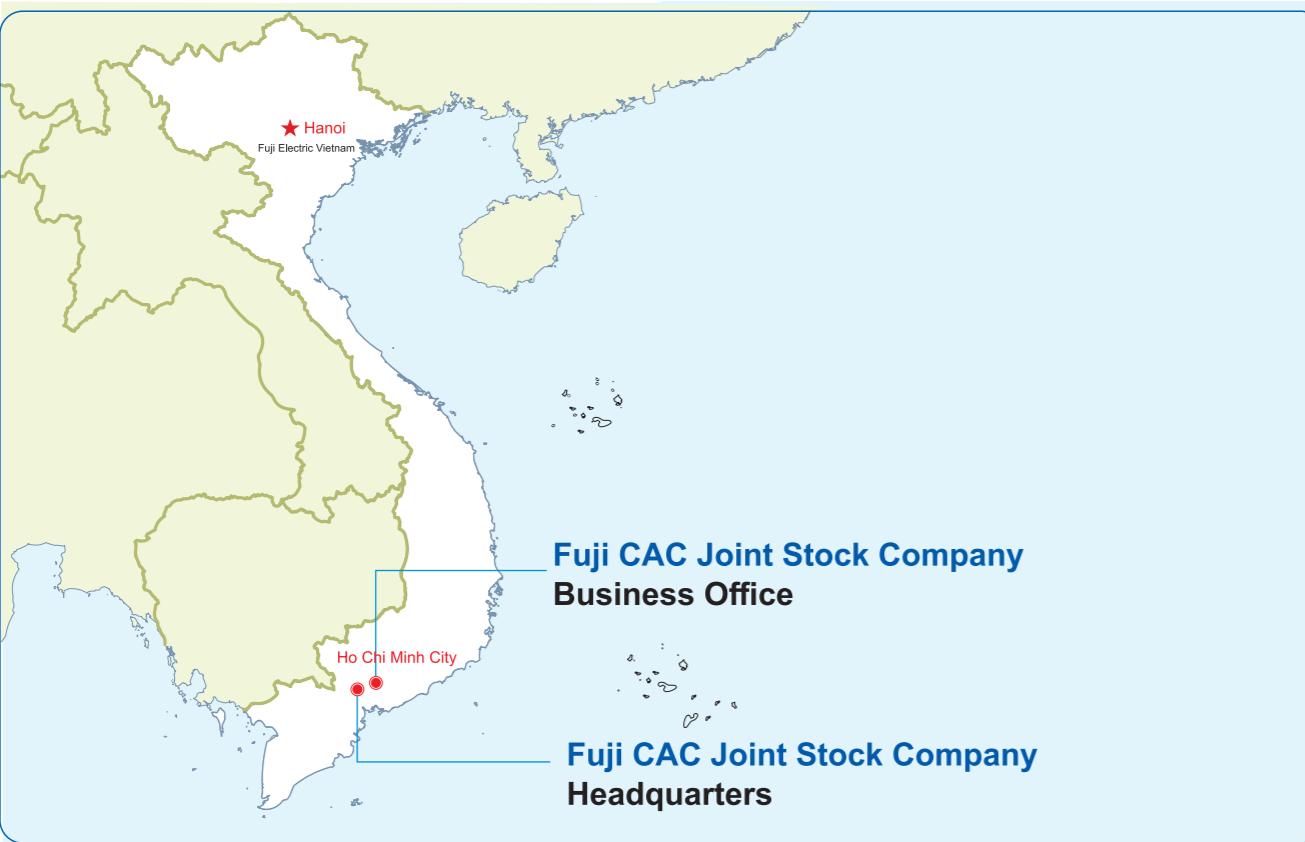


## CONTACT US



## Fuji Electric In Southeast Asia



Innovating Energy Technology

## Corporate Profile



**Business Office:**  
3E9 Tran Nao Street, Binh An Ward, District 2,  
Ho Chi Minh City, Vietnam.  
Tel: +84 28 3742 0959  
Fax: +84 28 3742 0891  
Website: [www.fujicac.com](http://www.fujicac.com)

**Headquarters:**  
938A9 Street A, Cat Lai Industrial Zone, District 2,  
Ho Chi Minh City, Vietnam.  
Tel: +84 28 3742 3076  
Fax: +84 28 3742 3077  
Website: [www.fujicac.com](http://www.fujicac.com)

Fuji CAC Joint Stock Company

# FUJI CAC JOINT STOCK COMPANY

## Corporate Outline

### Company name

Fuji CAC Joint Stock Company  
(A company of Fuji Electric Group)

### Established

1995

### Business Office

3E9 Tran Nao Street, Binh An Ward,  
District 2, Ho Chi Minh City, Vietnam.

### Headquarters

938A9 Street A, Cat Lai Industrial Zone,  
District 2, Ho Chi Minh City, Vietnam.

Tel: +84 28 3742 0959

Fax: +84 28 3742 0891

Email: contact@cacvn.com

Website: www.fujicac.com

## About Us

Since the establishment in 1995, Fuji CAC has been writing our story of success. Starting at an electrical and instrumentation service provider, Fuji CAC has grown to become one of the most reliable and respected engineering, procurement, construction, and maintenance contractor for multiple business sectors in Vietnam and Southeast Asia countries.

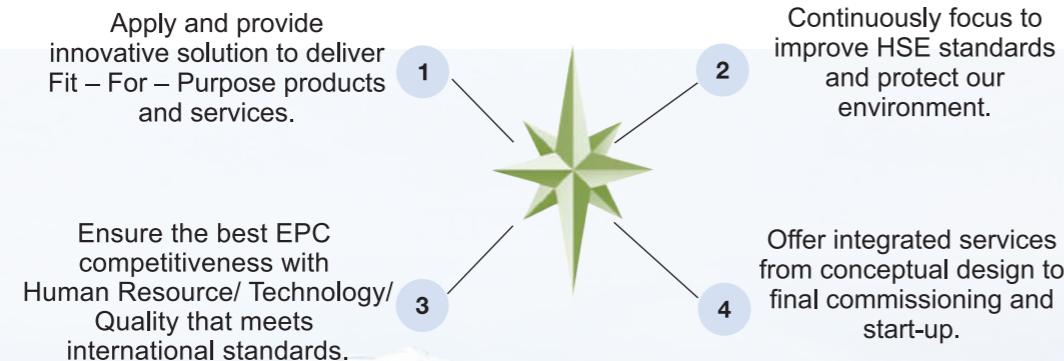
On December 10 of 2015, Fuji Electric Co., Ltd (FE) - with Revenue of ¥813.6 billion (equivalent US\$8 billion) and 26,508 employees - concluded a contract to acquire a 65% stake in CAC Joint Stock Company (CAC). FE will maximize the use of CAC's engineering functions to jointly expand business operations in Asia through its five business segments: Power and Social Infrastructure, Industrial Infrastructure, Power Electronics, Electronic Devices, and Food and Beverage Distribution.

## Vision

Achieve the goal of being the leading solution company in the industrial electrical market of Southeast Asia and acting as Southeast Asia Engineering Center of Fuji Electric.

## Mission

Dedicated to providing optimal solutions that are able to meet the customer's specifications & requirements with the following objectives:



## Core Value

### [C] Creative to

Develop innovative solution to build a green industrial world.

### [A] Association to

Provide our clients professional solutions, products also services with stable quality as clients's demand. Provide our clients the highest value added and value distribution to develop the Vietnamese and Asian industries. Build investment value for clients, partners, and owners based on professionalism, integrity, and equality.

### [C] Commitment to

Become one of the leading companies of total industrial solution providing in Vietnam and Southeast Asia with high techniques, advanced technologies, and professional after-sales services.

Provide services along with the entire life-cycle of our customer investment.

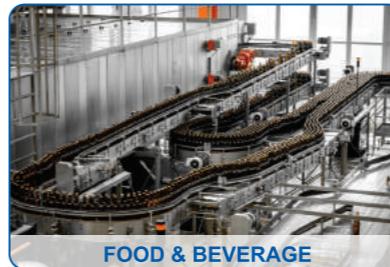
Together we have built Fuji CAC to become strong, leading, and trusted Solution Provider in Vietnam.

## Main Business

Fuji CAC is known as the leading Industrial Solution Provider in Electrical, Automation & Control market, and now acting as a Main MEP Contractor (complete scope of Electrical, Control, HVAC, and Piping & Firefighting) in Vietnam and Southeast Asia Countries.

Founded in 1995, Fuji CAC has been keeping the stable development and becoming a trusted solutions and services provider for many well-known International & local companies in Food & Beverage, Chemical, Oil & Gas, Power, Cement, Infrastructure & Facility, Solar & Renewable Energy ...

Fuji CAC also has experienced in implementing projects & services overseas in African and Asian countries.



FOOD & BEVERAGE



OIL & GAS, POWER



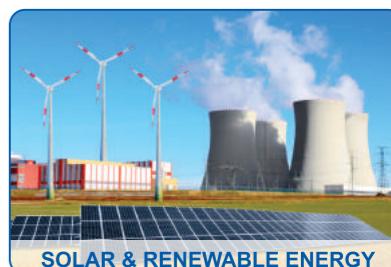
CHEMICAL & FERTILIZER



INFRASTRUCTURE & FACILITY



CEMENT & CONSTRUCTION MATERIAL



SOLAR & RENEWABLE ENERGY

## Fuji CAC History

1995      2001      2002      2005      2008      2011      2014      2015      2016

- Fuji Electric's Capital Participation
- F&B project in Cambodia
- F&B project in Myanmar
- ISO 9001-2008 TUV Certificate
- EPC Contract to build up the Complete Cement Plant
- Complete Electrical, Instrumentation & Automation Package
- Workshop Establishment
- ISO 9001- 1994 Certificate.
- 1st EP Package Oversea Project
- CAC Company Establishment

## Manpower

At Fuji CAC we focus on building great people who do extraordinary things. Our greatest assets are our workforce.

Our high enthusiasm and professional workforce are well-trained to:

- Proactive involve all the details of installation, modification, troubleshooting and maintenance programs.
- Motivated to identify the opportunities to reduce operational cost and improve operational efficiency.
- Effectively manage external contractors or suppliers in all process control & instrumentation works.

Fuji CAC team always has the most advantage tools and systems in hand that guarantee reliability and best performance. With the strong commitment of our Senior Project Management Team, Safety Officer, Site Management Team and the most reliable subcontractor, we assure our customers the highest quality, safety and timely completion of projects.



## HSE (Health, Safety and Environment)



"Strictly follow the HSE Policy to avoid any possible incidents. If a task cannot be executed in a safe manner, then we definitely will not do it until a totally safe approach is arrived to."

- Nguyen Viet Trung, General Director of Fuji CAC.

Fuji CAC is committed to providing the highest level of safety at all time. Corporate HSE Policy has been developed and continually managed to meet the international HSE standards. We ensure all the products we use and supply are environment friendly and safety guaranteed.

### Fuji CAC HSE 4 GOLDEN GOALS:

- Manage Perfect Safety Record By All Means
- No Lost Time Injury
- Accident-Free Environment
- Zero Environment Damage

### HSE MANAGEMENT SYSTEM

Corporate HSE programs are binding for every employee. We dedicated to circulating our HSE management system to the level of understanding of each employee; this is getting done through regular HSE training program for both site and office personnel.

## Workshop

The investments in 3,000 m<sup>2</sup> workshop are Fuji CAC determination to ensure our company able to provide the highest quality service standard to take on any critical tasks that our clients request.

### Main Purpose of workshop:

- To supply Low voltage switchgear (MDB, MCC, DB) & Control cabinet for End Users/ Contractors & Fuji CAC project.

### The benefit that workshop can offer to Clients:

- Supply on-demand Low voltage switchgear & Control cabinet.
- Offer well-equipped facilities for FAT (Factory Acceptance Test) in-house.
- To complete Fuji CAC product & service portfolio as "one stop shopping": Design – Fabricate – FAT – Supply – Installation – Commissioning – SAT (Site Acceptance Test) & Hand over Cover all service and products from workshop.
- LV switchgear/ MCC, Distribution panel, Control Panel, Gas Analyzer Panel.

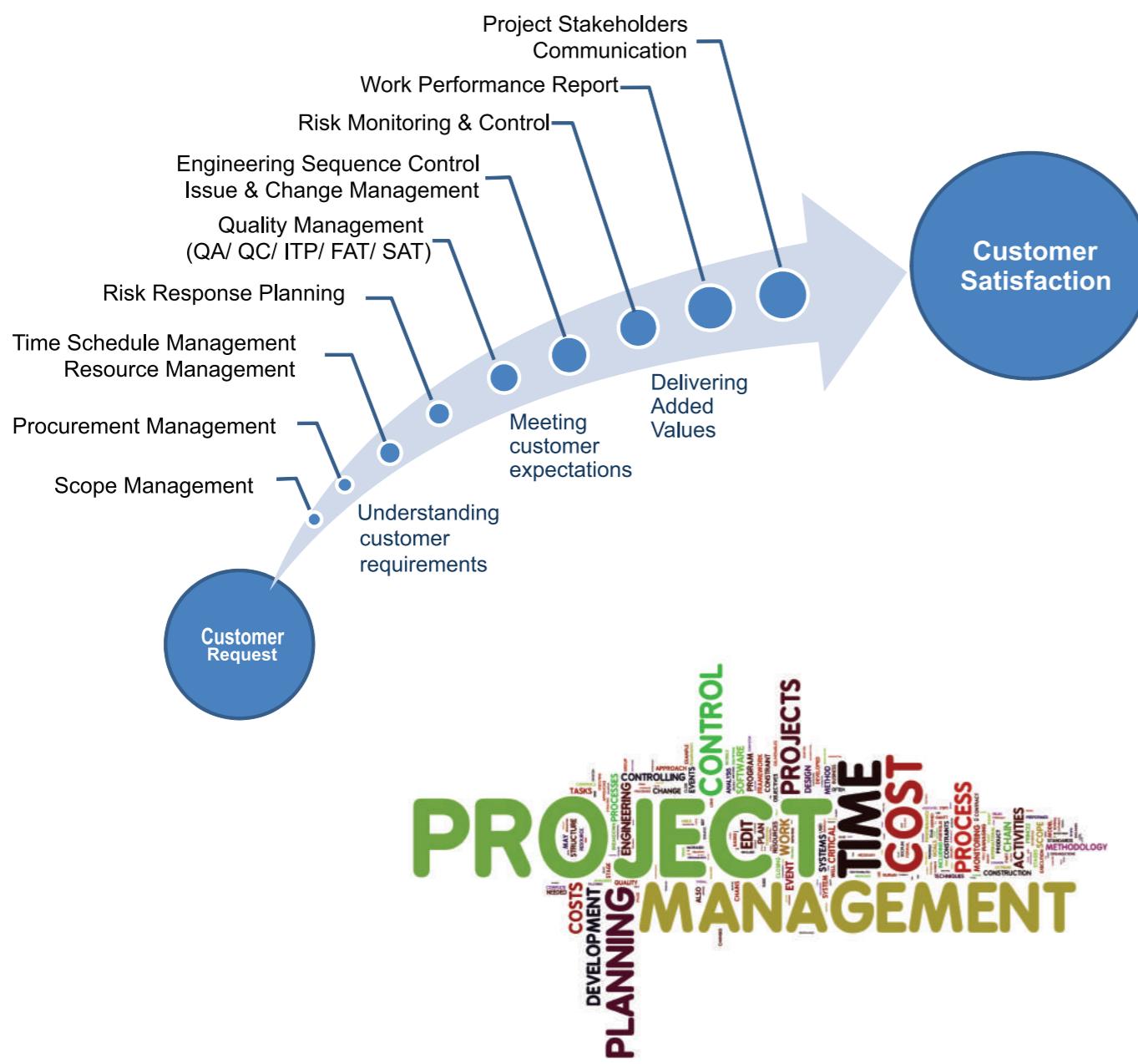


## Project & Engineering Management



The project manager is at the heart of every successful project. Fuji CAC not only provides a highly qualified and dedicated project manager team to each client but also applies the International PM Standard for Project implementation (PMI).

Project management dedicated to providing the optimal solution, discipline, commitment, expertise and successful detail execution leads to project success for Fuji CAC. Positioning as one-stop destination, Fuji CAC extremely focus on having the best Project Manager Team and contractor management services in the business equates to well-run EPC project and maintenance sites for our clients.

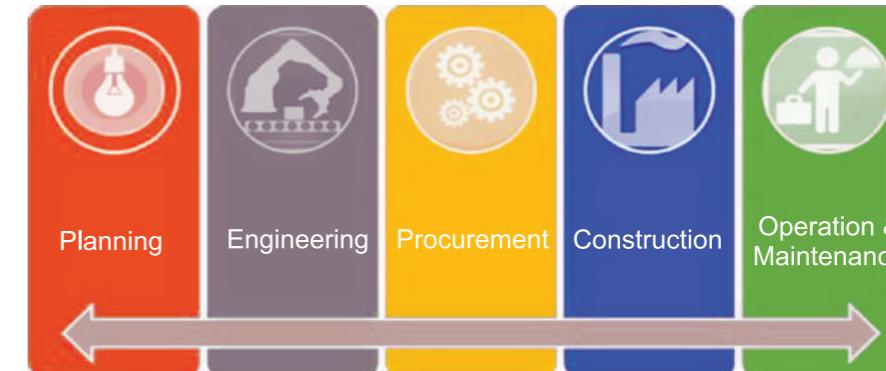


## One-Stop Shop Service

To assist in the goal of becoming a total solution provider that carries out projects in a comprehensive manner, Fuji CAC has established the Project Planning, Engineering, Procurement, Construction, and Service Department. We also continue to secure essential capabilities for each process, including the development of independent workshop.

In addition, Fuji CAC will provide greater satisfaction and services to customers by further strengthening our core expertise and the latest technology.

The idea is to provide convenient and efficient services and also to create the opportunity for our customers. Our engagement covers a wide professional services.



- Engineering (Electrical, Instrumentation) & Design.
- Procurement with emphasis on fast and timely delivery, with additional service from Fuji CAC engineering Expertise Team.
- Construction Management, Construction Supervision and Installation.
- Third Party Inspection Services.
- Testing & Commissioning.
- Maintenance & Upgrade.
- Turnkey Projects.
- Start-up.
- Shutdown.
- Hot Changeover.
- Total Project Management, Project Execution Planning, Project Cost Control.
- On-call services 24 hours a day, 7 days a week, to prepare for unexpected emergencies.

## Quality Assurance & Control

Dedicated to delivering excellent services that meet and exceed customers' expectations in each and every stage of projects and services" - Corporate Quality Policy Statement

### Certificate



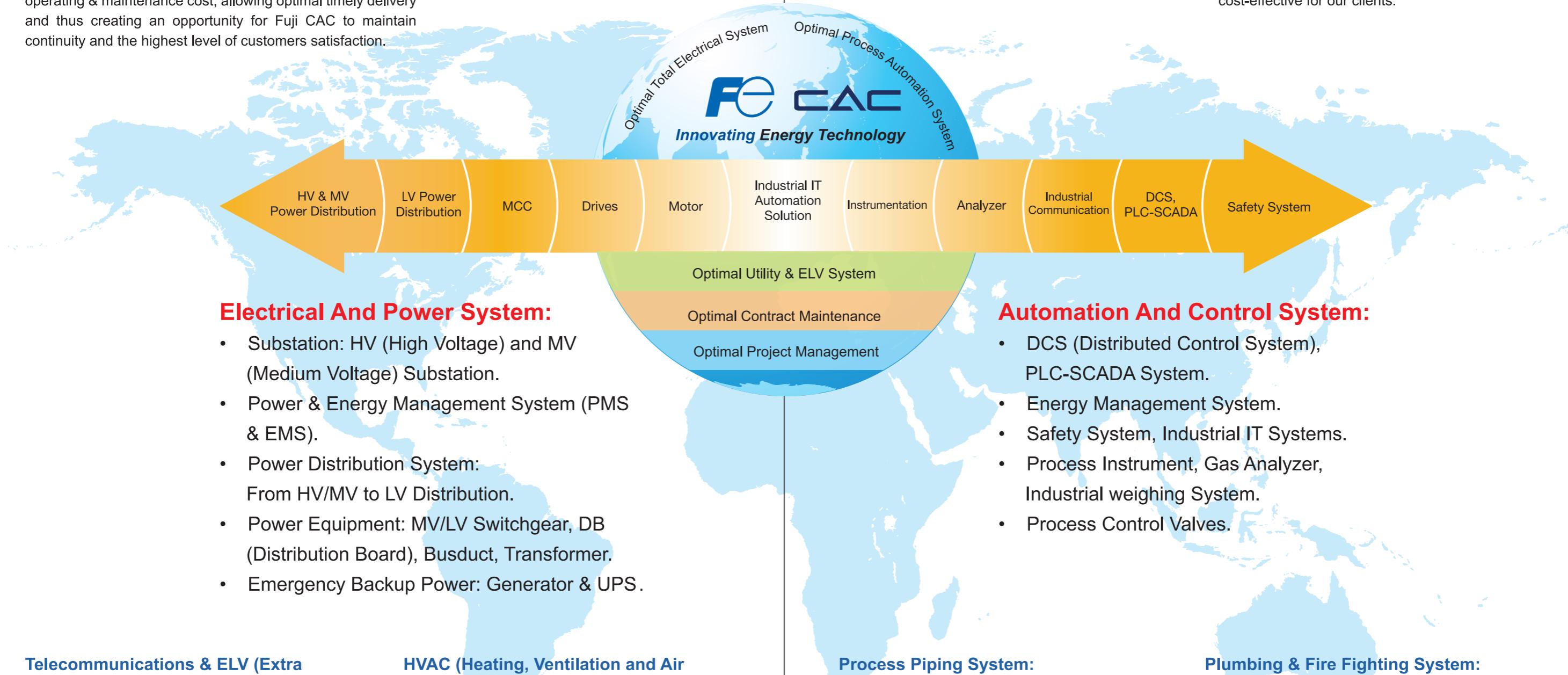
Fuji CAC takes pride and honor in declaring the company commitment to satisfy Fuji CAC customers by the culture of Driven to deliver excellence. It has been accredited with internationally acclaimed Quality Management Certificate ISO 9001:1994 for many years and in July 2018 the Certification was upgraded to ISO 9001:2015 Certificate by Prestige Global TÜV Rheinland Quality Assurance.

Fuji CAC Internal Quality Management Systems guarantees that all customer requirements are met, all processes are properly controlled and continuous improvement is pursued. All Fuji CAC's employees are acting upon the protocol that every project conducted in highly flexible way with quality, functionality, on-time delivery, cost-effective and with our customers' specific needs as principal focus.

## Business Model

Fuji CAC deliver Fit - For - Purpose on Full Project Life-cycle, from Engineering, Design, Completion to Start Up and Maintenance, that optimizes the process performance while reducing operating & maintenance cost, allowing optimal timely delivery and thus creating an opportunity for Fuji CAC to maintain continuity and the highest level of customers satisfaction.

Our solid expertise and over 20 years of extensive experience in Electrical and Automation Systems guarantee the most reliable, high quality and cost-effective for our clients.



### Telecommunications & ELV (Extra Low Voltage) System:

- Fire Alarm systems, Security/Access Control.
- Closed-Circuit Television (CCTV) & Master Antenna Television (MATV).
- Telephone & data (cabling, PABX).
- Public Address (PA).

### HVAC (Heating, Ventilation and Air Conditioning) System:

- Variable Refrigerant Volume (VRV) systems.
- Chilled Water Systems.
- Fresh air, ventilation and exhaust systems.
- Cold room Unit.
- Building Management System (BMS).

### Process Piping System:

- Complete detail design, equipment supply & welding and installation service for Piping system: Main Steam line, Main Condensate line, Vaporized CO<sub>2</sub>, Low Pressure Compressed Air, Raw Water, RO Treated Water, Chilled Water, Pipe support...

### Plumbing & Fire Fighting System:

- Hydrant system Pump House.
- Piping Distribution.
- Sprinkler system.
- Water drainage and plumbing system.

**Focus Industries**

**FOOD & BEVERAGE**
**SCOPE OF WORK**

- Detailed Engineering.
- Procurement, Cost & Schedule Control.
- Power & Energy Management System (PMS & EMS).

**SCOPE OF SUPPLY:**
**Electrical & Automation System**

- Process Automation System.
- Power & Energy Management System (PMS & EMS).
- Main & Sub power station: from 6.6 -110KV.
- Power Distribution Equipment: MV Switchgear, MDB, MCC, Transformer, Busduct, Distribution Panel.
- Lighting System: LED & traditional lighting fixture
- ELV system: Earthing & Lightning, CCTV, Access Control, Telephone & data, Fire Alarm, PA. Integrated solution for ELV system.

**Process Piping System:**

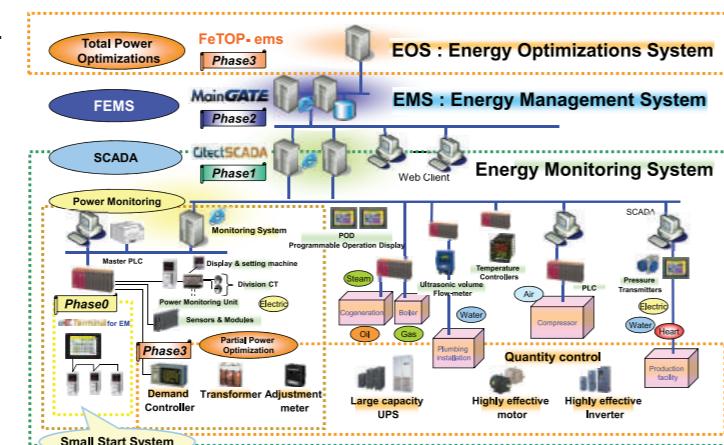
- Utilities Piping System: Steam, Condensate, Vaporized CO<sub>2</sub>, Compressed Air, Raw Water, RO Treated Water, Chilled Water, Pipe support...
- Hygienic Piping System.

**HVAC System:**

- Variable Refrigerant Volume (VRV) system.
- Chilled Water system.
- Fresh air, ventilation and exhaust system .
- Cold room unit.
- Building Management System (BMS).

**Plumbing & Fire Fighting System:**

- Hydrant system Pump House.
- Piping Distribution, Sprinkler system.
- Water drainage and plumbing system.


**Focus Industries**

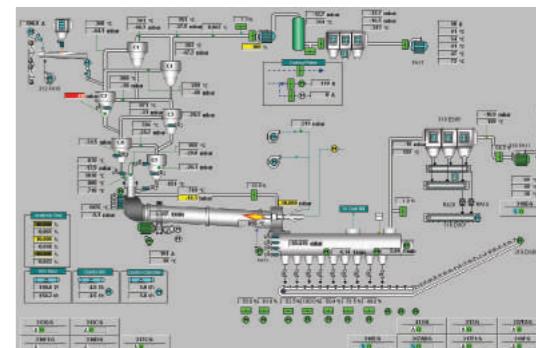
**CEMENT & CONSTRUCTION MATERIAL**
**SCOPE OF WORK:**

- EPC Contractor, included Design, Procurement & Construction Management for whole Cement Plant.
- Engineering: Complete Project Management, Process Engineering management, Design complete Electrical system.
- Procurement: Mechanical Process equipment, Electrical, specific construction works & Auxiliary equipment.
- Construction Management.

**SCOPE OF SUPPLY:**

- High, Medium & Low voltage stations.
- Starters for Medium Voltage Motors.
- LV Switchgear - MDB & MCC.
- Motor & Drives.
- Diesel generator.

- Plant control system consists of: Distributed Control System – DCS.
- Optimum control system, design system.
- Quality Control System, Scanner for Kiln.
- Information management system.
- Stand-by power distribution system and accessories.



**Focus Industries**

**CHEMICAL & FERTILIZER**
**SCOPE OF WORK:**

- Detailed Engineering, Procurement, Cost & Schedule Control, Construction Management.
- Engineering & Commissioning for Plant Control System.

**SCOPE OF SUPPLY:**

- Ex equipment, Process Instrumentation and CEMS (Continuous Emission Management System)
- Automation (DCS + Batch), MCC, Cable & Weighing Package.
- Complete Electrical System: Main power station, LV Switchgear - MDB & MCC, Lighting, Earthing & Lightning, ELV system (CCTV, FA, Tel & Data).
- Diesel generator, stand-by power distribution system and accessories.
- Motor & Drives.
- Plumbing & Fire Fighting System: Hydrant system Pump House, Piping Distribution, Sprinkler system, Water drainage and plumbing system.


**INFRASTRUCTURE & FACILITY**
**Focus Industries**

**SCOPE OF WORK:**

- Detailed Engineering, Procurement, Cost & Schedule Control, Construction Management.

**SCOPE OF SUPPLY:**
**Complete Electrical System:**

- Main power station, LV Switchgear - MDB & MCC.
- Lighting, Earthing & Lightning, ELV system (CCTV, FA, Tel & Data).
- Motor & Drives.

**Automation:**

- PLC-SCADA, DCS, Control panel.

**Instrumentation:**

- Level, Temperature, Pressure, Analyzer.

**FMCS**

- Facility Monitoring Control System


**Focus Industries**

**OIL & GAS, POWER**
**SCOPE OF WORK:**

- Detailed design & Document control, Scheduling, Procurement & Expediting, Instruction for installation, commissioning onshore & offshore services with both ANSI/NEMA and IEC standards.

**SCOPE OF SUPPLY:**

- Transformer: Liquid filled Transformer, Dry Transformer.
- MV switchgear, LV switchgear, Small distribution panel (DBS).
- Generator Control & Synchronizing Panel.
- Motor control center & intelligent motor control center (MCC & IMCC).
- Busway System.
- Motor and Drives.
- Neutral grounding Resistor (NGR).
- Process instrument and gas analyzer equipment.
- PLC, DCS.
- ICSS – Integrated control and Safety System.
- Multiphase Flow Meters, piping spool skid assembly and supply complete system.
- Sand monitoring systems.


**Focus Industries**

**SOLAR & RENEWABLE ENERGY**
**SCOPE OF WORK:**

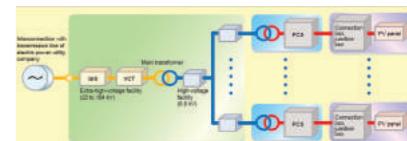
- Detailed Engineering, Procurement, Cost & Schedule Control, Construction Management.

**SCOPE OF SUPPLY:**

**Rooftop Solar application:** EPC for complete system.

**Large scale Solar farm:** in cooperation with Engineering Partner, we offer full solution for Solar projects as EPC Contractor.

- Engineering with optimum PV panel circuit, single line diagram from PV panel to Grid, optimum PV layout & foundation solution.
- Procurement material for whole project: PV module system, PCS station, 110kV substation & grid connection
- Construction & project management.
- Commissioning & pre-operation.



## FUJI ELECTRIC CORPORATE HISTORY

Fuji Electric continues to evolve in step with the times and with society, with technology as our driving force.

1923	■ Fuji Electric Manufacturing Co., Ltd., established Established as a capital and technology alliance between Japan Furukawa Electric Co., Ltd., and German Siemens AG. The result is a company with characteristics inherited from industry in both countries. 
1925	■ Began operation of the Kawasaki Factory
1935	■ Established Fuji Tsushinki Manufacturing Co., Ltd. (present Fujitsu Limited), by spinning off the Telephone Department
1942	■ Began operation of the Matsumoto Factory

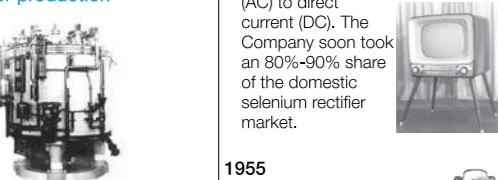
1943	■ Began operation of the Fukiage and Toyoda factories
1944	■ Began operation of the Mie Factory
1961	■ Began operation of the Chiba Factory
1968	■ Merged with Kawasaki Denki Seizo Co., Ltd., and commenced operations at the Kobe and Suzuka factories

1973	■ Began operation of the Owatara Factory
1984	■ Changed company name to Fuji Electric Co., Ltd.
1991	■ Began operation of the Yamanashi Factory
2002	■ Introduced Company symbol mark 

2003	■ Changed name to Fuji Electric Holdings Co., Ltd., owing to shift to pure holding company system
2008	■ Established METAWATER Co., Ltd., (joint venture with NGK Insulators, Ltd.)
2011	■ Fuji Electric FA Components & Systems Co., Ltd., merged operation with Schneider Electric Japan Ltd. (Power distribution and control equipment joint venture)
2012	■ Introduced brand statement <b>Innovating Energy Technology</b>
2013	■ Began operation of the factory at Fuji Electric Manufacturing (Thailand) Co., Ltd.
2014	■ Created new corporate brand emblem for products 
2015	■ Established Reliable Turbine Services LLC (United States)
2016	■ Completed new power semiconductor research and development building at Matsumoto Factory

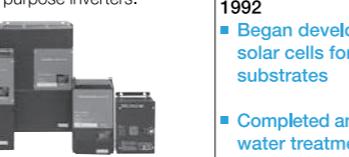
2016	■ Established Fuji Ntelligence GmbH (Germany)
2016	■ Established Fuji CAC Joint Stock Company (Vietnam)
2016	■ Established Fuji SEMEC Inc. (Canada)
2016	■ Completed new Companywide research and development building at Tokyo Factory

## 1920–1980

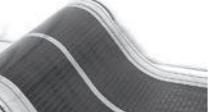
1924	■ Began manufacturing electrical machinery
1925	■ Began transformer production
1927	■ Began electric fan production
1930	■ Launched mercury-vapor rectifier production 
1933	■ Began expansion circuit breaker production
1936	■ Built first hydraulic turbine, 4,850HP Francis Turbine 
1937	■ Began watt-hour meter production

1954	■ Began ultra-compact magnetic switch production 
1959	■ Began manufacturing silicon diodes
1965	■ Electric propulsion system fitted to Antarctic exploration ship <i>Fuji</i> 
1969	■ Began production of vending machines Used know-how as a vendor of refrigerated milk showcases to move into vending machines. Delivered 230 beverage vending machines to the 1970 Osaka World Exposition, prompting the wider spread of domestically made vending machines. 
1971	■ Developed centralized monitoring and control systems for power utility companies First computerized control system in Japan, using the FACOM-R mini-computer
1973	■ Began production of selenium photoconductive drums
1978	■ Began research into amorphous solar cells
1981	■ Developed and commenced manufacture of electric propulsion system for ice-breaking ship <i>Shirase</i>
1985	■ First generation mini UPS "M-UPS Series" launched
1987	■ Developed IGBT module

## 1990

1991	■ Began manufacturing general-purpose inverters First in the industry to develop general-purpose inverters. 
1992	■ Began development of solar cells formed on film substrates ■ Completed an ozone-based water treatment system
1993	■ Delivered the first generator (600MW output) of Noshiro Power Station
1996	■ Won order for IGBT main conversion devices used in electric railways (world's first large-capacity flat IGBT) 
1998	■ Delivered 100kW phosphoric acid fuel cell
1999	■ New mini-UPS "J-Series" launched 

## 2000

2006	■ Commenced mass production of film substrate amorphous solar cells Began mass-producing flexible amorphous solar cells based on plastic film substrates. 
1992	■ Began development of solar cells formed on film substrates ■ Completed an ozone-based water treatment system
1993	■ Delivered the first generator (600MW output) of Noshiro Power Station
1996	■ Won order for IGBT main conversion devices used in electric railways (world's first large-capacity flat IGBT) 
1998	■ Delivered 100kW phosphoric acid fuel cell
1999	■ New mini-UPS "J-Series" launched 

## 2010

2010	■ Developed a new three-level converter circuit and a new three-level power module, realizing highly efficient electric power conversion 
2012	■ Launched dedicated inverters for air-conditioning and water treatment systems, FRENIC-HVAC and FRENIC-AQUA ■ 140MW geothermal power plant, the largest single-unit capacity in the world, started operation 
2014	■ Launched power electronics equipped with SiC power semiconductors ■ Launched power conditioning sub-system for mega solar power generation systems 
2015	■ Launched aerosol analyzers Began contributing to elucidation of nature of PM2.5 
2016	■ Launched steam-generation heat pumps Started making contributions to energy savings through recycling of low-temperature factory exhaust heat 