



CTG

Power Systems  
International LLC

# Company Presentation



## ABOUT CTG

*CTG is a long-standing, customer centric and highly reputable international power generation services company.*

- ❑ [CTG Power Systems International, LLC \(CTG-PSI\)](#) is our flagship and corporate parent company providing full-service engineering, procurement, construction, project management, logistics support, commissioning and maintenance services (EPCM) for the design, installation, modification and O&M of conventional fossil fuel fired and biomass power plants.
- ❑ [CTG Power Solutions, LLC \(CTGPS\)](#) is an affiliate company of CTG-PSI providing reliable fast track short and long term mobile rental power solutions utilizing various Solar, GE, Siemens and Mitsubishi Mobile Gas Turbine Generator Packages.
- ❑ [The Renewable Technologies Corporation](#) is a subsidiary company of CTG-PSI providing engineering and EPC services for the design, installation and modification of most any renewable energy power project with specific expertise in biomass power generation.
- ❑ [The Camelot Technologies Group International, Inc.](#) is a subsidiary company of CTG-PSI and remains a leader in the sale of new, used and refurbished heavy gas and diesel fired/reciprocating power generation equipment.

## DIVERSIFIED GLOBAL ENERGY SOLUTIONS

CTG offers our clients a distinct competitive advantage including: Engineering, Procurement, Project & Construction Management Services (EPC) for a multitude of electrification projects. Simply stated, we do it better, faster, leaner, safer, with quality and at less cost than any other service providers.

Not only do we perform EPC and operations and maintenance services (O&M), our affiliate company, CTG Power Solutions LLC provides short and long term mobile rental power solutions worldwide.

For the last 25 years, CTG has been a reliable and trusted global leader primarily in the supply of new surplus, used and refurbished natural gas and reciprocating power generation equipment, technical support services, appraisal/valuations and consulting services.





## Primary Market Segments

**CTG Power Systems International, Inc. (CTG-PSI)** [www.CTGPowerSystems.com](http://www.CTGPowerSystems.com) focuses on several diverse electrification opportunities in multiple energy market segments:

1. **Utility:** Peaking, combined-cycle, baseload power generation for utilities (e.g., IOUS, Municipals, RECs, CO-OPS).
2. **Industrial/Commercial:** Baseload, cogeneration and standby power generation for industrial and large commercial installations (e.g., paper and pulp, refining, heavy manufacturing, mining, hospitals, academia, shopping malls, data centers resorts).
3. **Interim Power Solutions:** Where short and long-term power is required to manage grid instability or unreliability, restoration of power in natural disasters and peak shaving.
4. **Emerging Grid:** Baseload generation for remote locations where small increments of additional high-reliability power is required (e.g., islands, military installations, developing economies).
5. **Blackstart Applications:** For larger land-based gas or diesel fired turbine power plants.
6. **Biomass, CHP and Waste-to-Energy Power Plants (Renewable Technology):** Gasification to biogas, syngas, methane, Combined Heat & Power

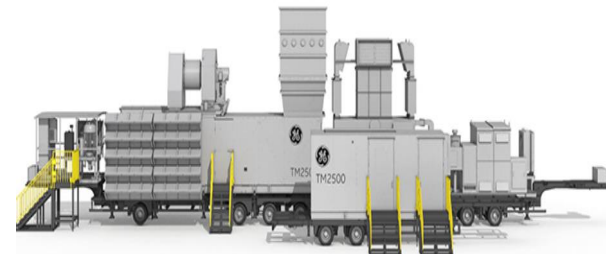
# CTG-PSI's CORPORATE MISSION

## COMPLETE TURN-KEY SOLUTIONS

*From Concept to Reality*

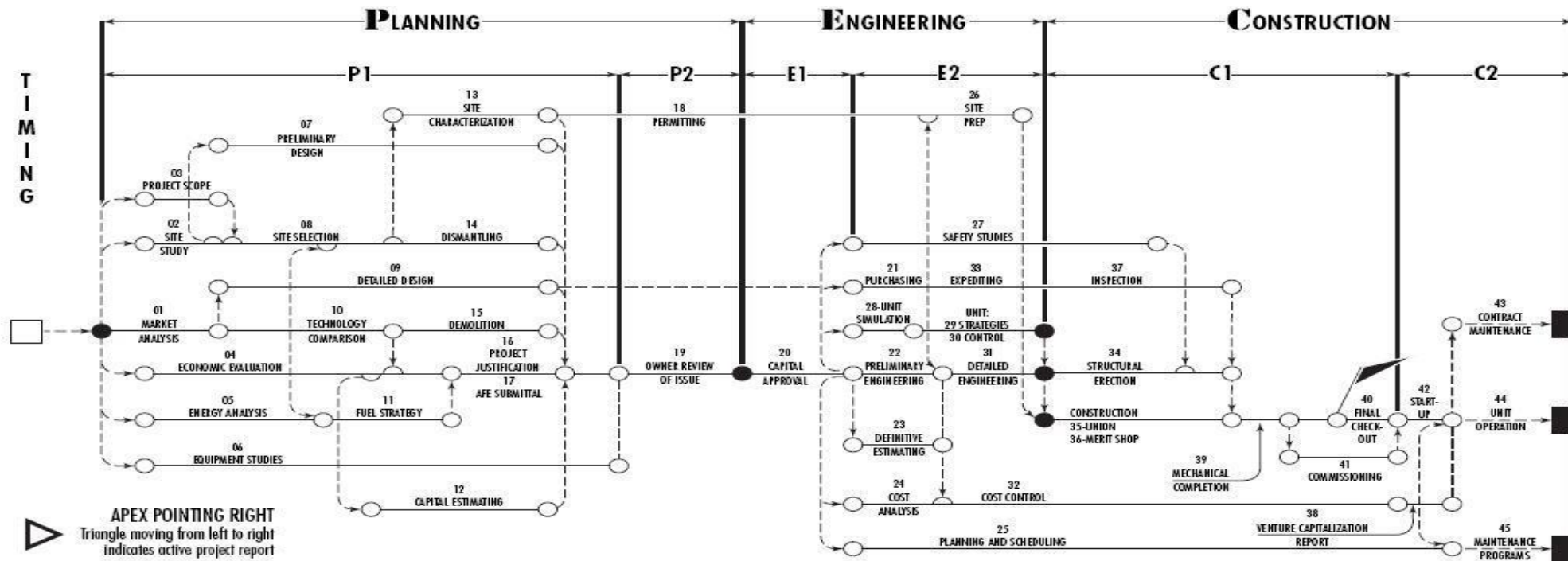
Utilizing internal resources, CTG-PSI provides in-house full-service project services, including:

- Land based and Mobile Rental Power
- Preliminary and Detailed Engineering & Design
- Procurement
- Project Management and Control
- Construction Management
- Start-up and Commissioning
- Plant Operation and Training
- O&M Services



# Complete Project Design & Flow

CTG offers a full complement of turn-key services as the complete enterprise solution for independent, merchant and distributed power developers. We address each phase of the plant building process thoughtfully and strategically.



## PLANNING

Phase	Task ID	Task Name
P1	01	MARKET ANALYSIS
	02	SITE STUDY
	03	PROJECT SCOPE
	04	ECONOMIC EVALUATION
	05	ENERGY ANALYSIS
	06	EQUIPMENT STUDIES
	07	PRELIMINARY DESIGN
	08	SITE SELECTION
	09	DETAILED DESIGN
	10	TECHNOLOGY COMPARISON
	11	FUEL STRATEGY
	12	CAPITAL ESTIMATING
	13	SITE CHARACTERIZATION
	14	DISMANTLING
	15	DEMOLITION
P2	16	PROJECT JUSTIFICATION
	17	AFE SUBMITTAL
	18	PERMITTING
	19	OWNER REVIEW OF ISSUE



## ENGINEERING

Phase	Task ID	Task Name
E1	20	CAPITAL APPROVAL
E2	21	PURCHASING
	22	PRELIMINARY ENGINEERING
	23	DEFINITIVE ESTIMATING
	24	COST ANALYSIS
	25	PLANNING AND SCHEDULING
	26	SITE PREPARATION
	27	SAFETY STUDIES
	28	UNIT SIMULATION
	29	UNIT STRATEGIES
	30	UNIT CONTROL
	31	DETAILED ENGINEERING
	32	COST CONTROL
	33	EXPEDITING

## CONSTRUCTION

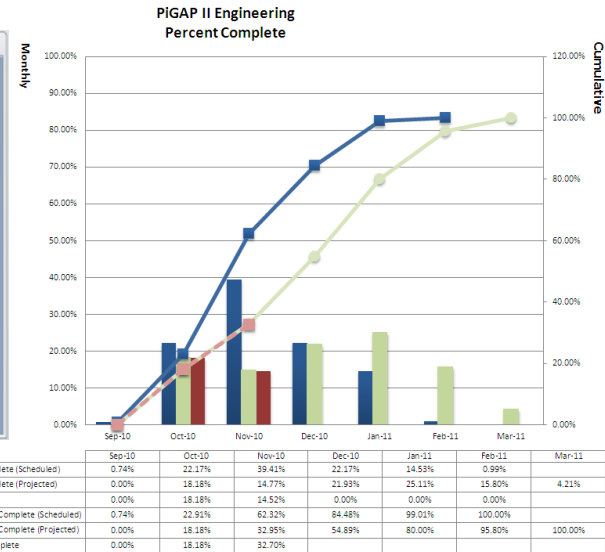
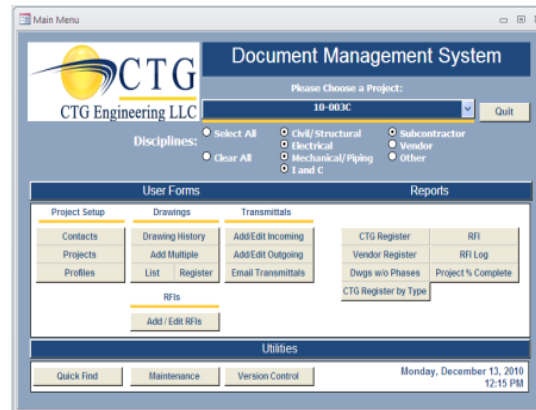
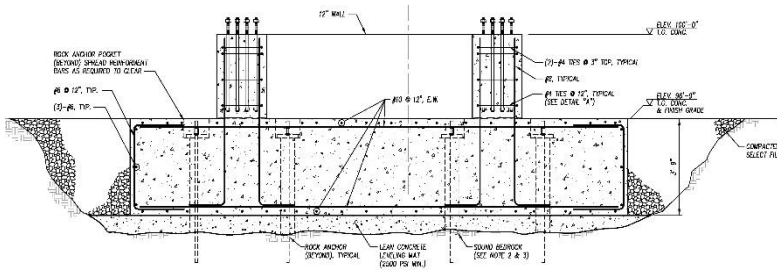
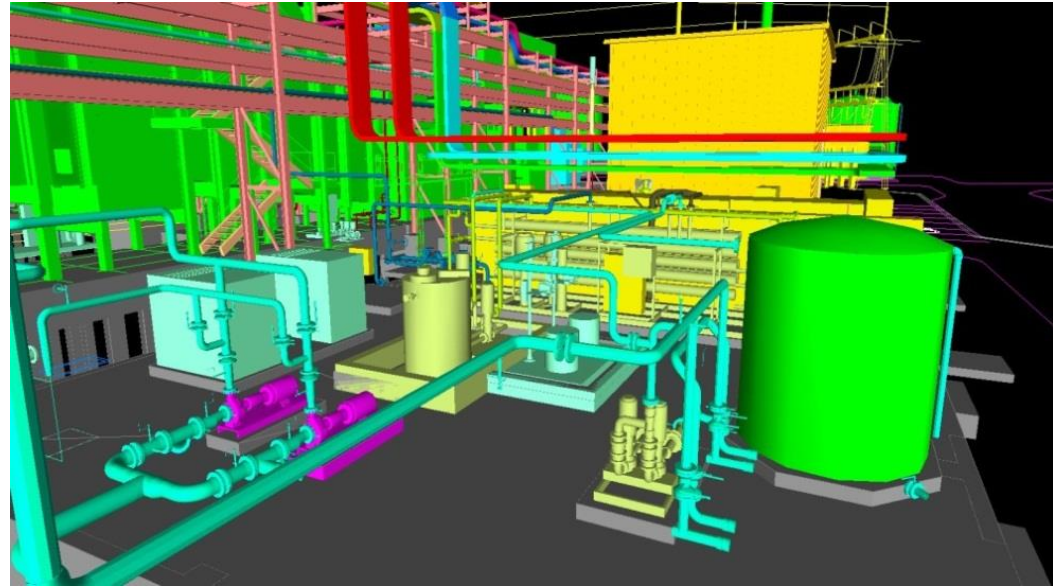
Phase	Task ID	Task Name
C1	34	STRUCTURAL ERECTION
	35	CONSTRUCTION-UNION
	36	CONSTRUCTION-MERIT SHOP
	37	INSPECTION
	38	VENTURE CAPITALIZATION REPORT
	39	MECHANICAL COMPLETION
	40	FINAL CHECK-OUT
C2	41	COMMISSIONING
	42	START-UP
	43	CONTRACT MAINTENANCE
	44	UNIT OPERATION
	45	MAINTENANCE PROGRAMS (MRO)*

\* MAINTENANCE-REPAIR-OVERHAUL

## ENGINEERING EXCELLENCE

CTG relies on the experience and expertise of the CTG Engineering International (CTG-E) team which uses the latest technology software and systems to provide:

- Feasibility Studies
- Preliminary and Detailed Engineering & Design
- 3-D Modeling and Laser Scan
- Project & Configuration Control
- Licensed Engineers in all major disciplines
- Construction Bid Packages
- Construction Engineering & Start-up Support



## FLAWLESS EXECUTION

CTG Power Systems International, Inc. provides the high measure of excellence on project & construction management required to bring each project from concept to completion. Our team has experience leading international power projects with responsibility including:

- Engineering
- Responsibility Matrix
- Procurement and Materials Management
- Project Schedule
- Construction Management
- Start-up and Commissioning
- Plant Operation and Training
- O&M Services







## RENEWABLE ENERGY SOLUTIONS

### RTC Power Systems International, Inc. (RTC-PSI)

RTC-PSI is a CTG Power Systems International company touching on many facets of the renewables sector. RTC-PSI provides an excellent solution set corresponding to the emerging need for the delivery of a wide diversity of renewable energy services in today's changing environmental landscape. We market and implement a very innovative and cost-effective renewable technologies program for most energy demands, together with energy efficiency strategies that provide our customers with long-term, progressive and sustainable solutions focused on biomass power.

- Cogeneration and CHP Facilities
- Existing Plant Upgrades
- Plants Utilizing Process Steam and Boiler Technologies
- Gasification Technologies
- Fuels including anaerobic digestion, rice hulls, chipped tires, MSW, bagasse



## *Meeting Global Power On Demand*

CTG's subsidiary, [CTG Power Solutions LLC](#) specializes in customizing its mobile power rental solutions for a wide variety of emergency, utility backup, grid stabilization, renewable, industrial and commercial applications.

Our various power solutions are designed to be competitive, scalable and tailored to meet energy production deficiencies of any customer worldwide.

CTG offers rapid response turnkey rental options and competitive pricing utilizing GE's 35MW Aeroderivative TM2500+ 50/60Hz. Dual Fuel Mobile Gas Turbine Package as well as several other smaller GT options.

Whether you require immediate or more lasting power, our flexible solutions deliver dependable and efficient electrical power when, and where you need it, for as long as you need it.



Loading TM2500+ for Air Transport

## POWER GENERATION EQUIPMENT SALES

### The Camelot Technologies Group International, Inc.

- Since 1995, CTG-I has been a global leader in providing clients with a reliable and cost-effective supply of new, used and refurbished surplus power generation equipment.
- From small diesel generators and gas turbines to complete power plants, CTG-I provides utilities and independent power producers with cost-effective power generation solutions to meet the requirements of projects worldwide
- Over \$500MM USD purchased and sold by (CTG-I).
  - Diesel and Gas Reciprocating Engines
  - Liquid and Gas Fired Combustion Turbines
  - Biomass and Gasification Systems
  - Complete Power Plants





# CTG-PSI PAST PROJECT EXPERIENCE

KEY PAST PERFORMANCE PROJECTS	286MW CGT BNYCP Facility US	240MW CGT Plant Venezuela	60MW CGT Plant Venezuela	50MW Diesel Plant Chile
International Experience	*	*	*	*
Mobilization/Demobilization	*	*	*	*
Assessing Power Needs	*	*	*	*
Providing Generator Equipment	*	*	*	*
Preparing Generator Sets	*	*	*	*
Hauling Generator Sets	*	*	*	*
Installing Generator Sets	*	*	*	*
Preventative Maintenance				*
Safety Plan	*	*	*	*
QC Plan	*	*	*	*
Program/Project/Construction Management	*	*	*	*

## MAJOR EPC POWER PROJECT EXPERIENCE

### 60 Mw Simple Cycle Plant PDVSA, PiGAP, Venezuela



2 Pratt & Whitney Swiftpac 30 Gas Turbine Packages will generate power for this 60 Mw Simple Cycle Electrical generation facility being constructed in PiGAP, VZ for PDVSA. This project began in the spring of 2010 and is to be completed in 2011.

#### SCOPE OF SUPPLY

- Design
- Engineering
- OEM & BOP Equipment Supply
- Construction Support
- Operator Training
- Start-Up
- Commissioning

#### SCHEDULE

14 Months from NTP on OEM equipment procurement to commercial operation

6 Months from start of construction to commercial operation

17231 Camelot Court, Land O'Lakes, FL 34638  
Tel: (813) 920-8725 / Fax: (813) 343-5754  
Email: [Info@Camelottech.com](mailto:Info@Camelottech.com)



### 240 Mw Simple Cycle Plant PDVSA, Puerto La Cruz, Venezuela



4 Rolls-Royce Trent 60 WLE Gas Turbines will generate power for this 240 Mw Simple Cycle Electrical generating facility being constructed in Puerto La Cruz, VZ for PDVSA. The project began in the spring of 2010 and is to be completed in 2011.

#### SCOPE OF SUPPLY

- Design
- Engineering
- OEM & BOP Equipment Supply
- Construction Support
- Operator Training
- Start-Up
- Commissioning

#### SCHEDULE

18 Months from NTP on OEM equipment procurement to commercial operation

8 Months from start of construction to commercial operation

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### 50 Mw Emergency Diesel Generation Power Plants Grupo SAESA Multiple Sites in Chile SA



#### Quellon, Chile 10 MW

CTG PS received the award to supply (21) 2000 Kw Emergency Diesel Generator Sets for multiple sites in Chile SA for Grupo SAESA.

#### SCOPE OF SUPPLY

- Site Engineering
- Procurement
- Logistics and Transportation
- Installation
- Training
- Start-up and Commissioning

#### SCHEDULE

Typical site was completed in 3 months from NTP to commercial operation

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# CTG PROJECT EXPERIENCE

## RENEWABLE PROJECT EXPERIENCE RTC Power Systems, LLC

RTC Engineers have amassed a great deal of technical experience providing design and construction support for many conventional and renewable energy projects.

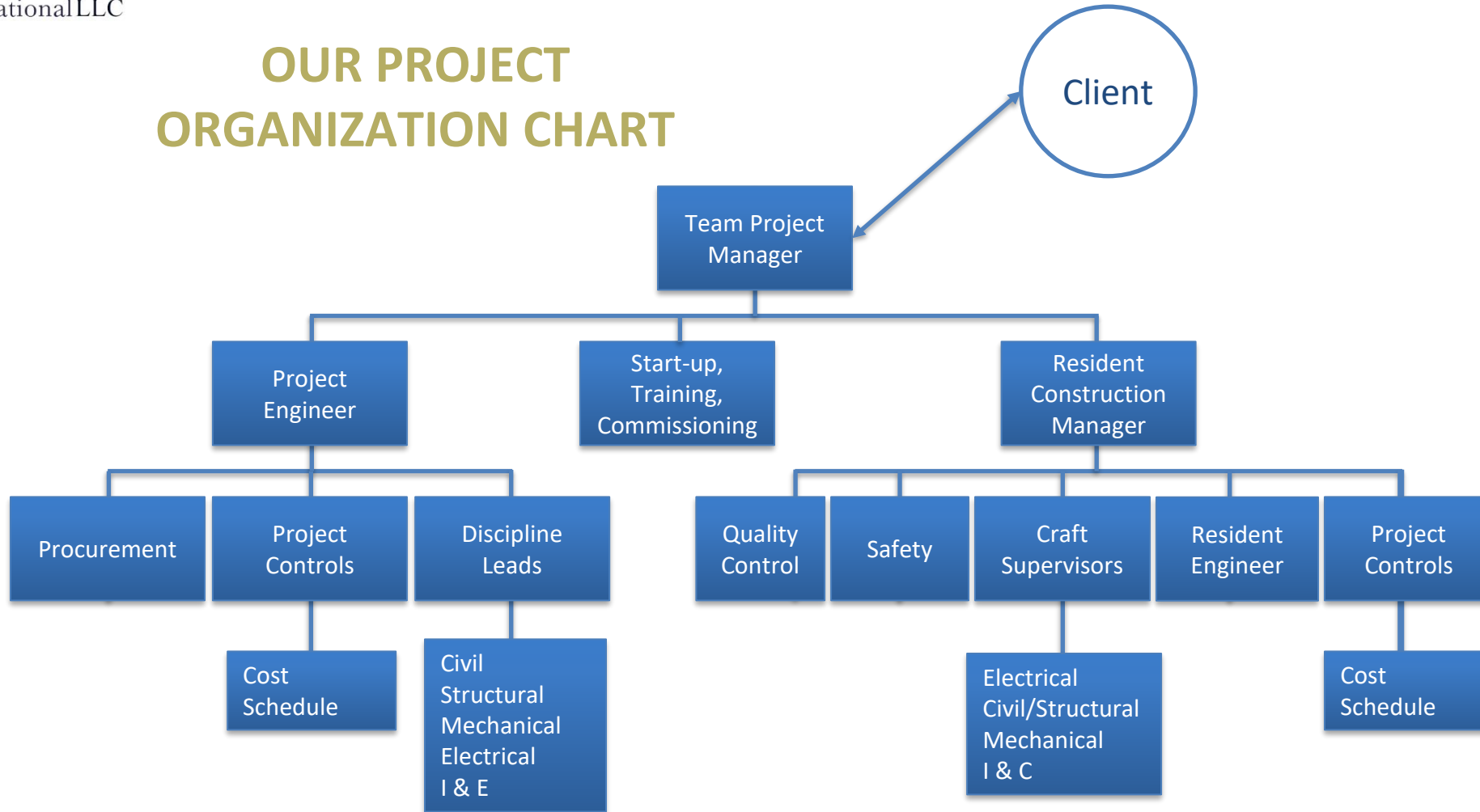
RTC has the ability to determine the best-fit technology for optimizing the use of the client's feedstock or bio-fuel. Whether it is for power generation or production of salable products, RTC will provide the safest and most economical facility solution for the client.

- MSW and Biomass Facilities
- Tire Pyrolysis Facilities
- Digester Gas and Low-Btu Fuel Applications
- Gasification Applications



# CTG PROJECT EXECUTION Overview

## OUR PROJECT ORGANIZATION CHART





## Why Choose Our Team?

The CTG team combines real world experience with engineering, procurement, project & construction management and equipment manufacturing experience which enables us to provide seamless project execution and client interface. It's all about trust, commitment and partnership. A better way to do business.

## The CTG Advantage

- Through our experience, knowledge and multi-disciplinary team, let us show you how we can provide provide the most comprehensive, cost effective and qualified project services available for any size project with a focus on:
  - Land based (permanent) and Mobile Power Generation (temporary) Equipment
  - Engineering and Detailed Design
  - Field and Site Services and Construction
  - Start-up and Commissioning
  - Plant Operation and Maintenance services
- Attention to detail ( “getting it right the first time”)
- The right size partner – customer focus
- Design and construction experience
- Global reach with local response



## STEPS TO SUCCESS

- ✓ Identify Project Goals & Objectives
- ✓ Conduct or Review Feasibility Study
- ✓ Formalize and Confirm Proposal
- ✓ Devise Division of Responsibilities
- ✓ Devise Acceptable Project Schedule
- ✓ Execute Master Services Agreement
- ✓ Project Award & Commencement



# CTG Power Systems International - Previous Customers (Equipment & Services)



THE CHUGOKU ELECTRIC POWER CO., INC.



Rolls-Royce



Saranac Power Partners L.P.



Banknorth





# Power.... Where and When Its Needed Most



*Whether You Need Permanent or Temporary Power Generation  
Let CTG Exceed Your Expectations*

Call: (813) 920-3500 or Email: [Info@CTGPowerSystems.com](mailto:Info@CTGPowerSystems.com)

