

Gas Conversion Company  
*Gas-to-Petroleum liquid™ Conversion Services*  
*For Gas Well Operators*



## Business Plan

1500 City Expressway    Oklahoma City, OK 74100  
Phone 405 123-4567  
[www.gastoliquidconversion.com](http://www.gastoliquidconversion.com)

Contact:  
John Smith, President  
[js@gastoliquidconversion.com](mailto:js@gastoliquidconversion.com)

Disclaimer: This document contains Confidential & Proprietary Information owned exclusively by Gas Conversion Company and was prepared for the Governor's Cup business plan competition as an example business plan. Some content has been modified and does not reflect actual Gas Conversion Company product and business information.

---

## Executive Summary

Gas Conversion Company (GCC), formed in 2009 as an Oklahoma “C” corporation, specializes in natural gas processing services. The company has designed a new and unique mobile unit—the **MiniRefinery™** that uses the company’s proprietary patented process to convert natural gas into a petroleum liquid **Gas Liquification™**. GCC is a multimillion dollar niche business opportunity that will satisfy a nation-wide market demand that presently has no other economically viable technological option. GCC’s revenue model includes leasing of equipment to oil & gas operators and charging a per MCF processing fee.

## Market

GCC’s technology targets both stranded and undervalued gas wells, as well as flare gas often associated with oil production.

According to the Interstate Oil & Gas Compact Commission, as of January 2007, there were 234,507 gas stripper wells (60 Mcfd or less) in the US, with 3,591 of these being abandoned in 2006 alone—more than 30,000 gas well abandonment’s since 1994. Of this market, more than 52,000 wells are found in Oklahoma, Texas, Kansas and Arkansas. More importantly, an increasing number of wells and small fields in the 150 to 500 Mcfd range are becoming stranded due to closure of antiquated gathering (pipeline) systems and facilities.

## Competition

No other gas liquidification (GL) company offers a mobile, well-site based service that produces a petroleum based liquid at the well site. Existing GL technology paths pursued by most of GCC’s competitors are economically incompatible for miniaturization. **GCC’s technology will be difficult and expensive to replicate because both its approach and process are difficult to reverse engineer and it is patent protected.**

Company	Product Produced	Technology Ready	Feasible Economics	Notes
GCC	Gasoline/Diesel	Yes	Yes	Field in 2011
Synfuel	Pentane	No	No	Expensive + Dangerous
Synergy	Diesel	No	No	Chapter 11 (2008)
Blue Star	Electricity/Diesel	Unknown	No	Fuel Cell Oriented
GTI	LNG	No	No	Cryogenic LNG at the wellhead, No supporting logistical infrastructure

## GCC Technology Uniqueness & Competitive Advantage

There are significant factors driving the demand for GCC’s technology, including:

- New environmental regulations that prohibit vented or flared gas;
- Aging national pipeline infrastructure that in many regions may not be economical to replace;
- Increasing regulatory, zoning, and urban encroachment upon existing production making access to pipelines problematical;

- Aging, declining gas production that lacks the volume or pressure to economically enter high-pressure trunk lines;
- Oil supply disruptions caused by civil war or unrest in the OPEC countries; and
- Rapidly declining US energy production.

## Executive Summary Continued

### Management

The GCC management team includes:

- Chairman - a proven industry executive and company builder whom is also a world renown petroleum chemist, and the inventor of the company's patented proprietary technology;
- President - a successful oil and gas industry executive, production manager, petroleum engineer with marketing experience; and
- Chief Operating Officer and CFO - a CPA is an experienced and proven business manager with oil field, petroleum transportation and storage expertise.

Together, the GCC team has more than 80 years of combined industry experience in both operations and management.

### Financials

The significance of GCC's business and technology is that the company projects cash flows in the first year, anticipates solid profits by year three. GCC has a **readily achievable goal of placing 1,000 units over an initial seven-year period**. This represents an average market penetration rate averaging some 125 plus units per year. Five year projections follow:

	2011	2012	2013	2014	2015
Revenues	682,150	2,662,495	7,082,565	13,662,213	21,730,098
Cost of Goods	111,360	1,065,344	2,854,528	5,577,280	8,921,792
<b>Gross Profit</b>	<b>570,790</b>	<b>1,597,151</b>	<b>4,228,037</b>	<b>8,084,933</b>	<b>12,808,306</b>
Operations / G&A	1,011,150	1,394,700	2,801,400	3,853,500	5,238,000
<b>Net Profit</b>	<b>-440,360</b>	<b>202,451</b>	<b>1,426,637</b>	<b>4,231,433</b>	<b>7,570,306</b>

### Offer Terms

To date, GCC has spent over \$1 million of its owners' funds and accomplished the following:

1. Created a US business presence, opening an office and website
2. Established and equipped a chemistry laboratory
3. Engineered a MiniRefinery & GL™ rig for the gas well market
4. Lined up a US banking relationship to finance unit manufacture for GCC
5. Identified first customers
6. Finalized the GCC Client Contract

GCC places a pre-funding value on the company at \$1,500,000, is offering a 25% equity interest in return for an investment of \$500,000.

### Use of Proceeds

Market entry requires final validation of GCC's lab proven technology. This validation period covers six months, with the following activities:

Finalize Engineering	\$250,000
<u>Company Operations / G&amp;A</u>	<u>250,000</u>
Total Funds Required	\$500,000

## Exit Strategy

GCC anticipates an M&A opportunity for the company between the end of the 4<sup>th</sup> to 5<sup>th</sup> year of operations. At 4.5 X EBIDAT this would produce a future value between \$20 million to \$35 million generating a return to investors of 10 X 1 to 17.5 X 1.

## Table of Contents

Executive Summary	3
Company Overview and Background	5
Product & Technology	5
Operational Benefits	6
Market Definition	7
Competitive Analysis	8
Market Positioning	9
Business Financial Model	9
Market Growth	10
Sales Approach and Proposition	11
Management	11
Product Validation Phase/Beta Test	13
Financials	14
Venture & Investment Risk	14
Terms	15
Use of Funds	15
Exit Strategies	15
Estimated ROI	15

## Acronyms & Unique Terms Used in this Business Plan

Gas Conversion Company	GCC
Gas Liquidification	GL
1,000 Cubic Feet per Day	Mcfd
GCC's portable, skid-mounted, processing plant	The MiniRefinery
American Petroleum Institute	API
Fisher-Tropsch Technology	FT
Department of Energy	DOE
Idaho National Energy and Environmental Laboratory	INEEL

---

## Company Overview and Background

Gas Conversion Company' (GCC) mission and focus is to deliver well-site GtG™ processing services using its exclusive MiniRefinery to gas well operators throughout the North American marketplace. GCC's technology turns gas wells into oil wells. By converting gas into liquid, production can then be easily stored on the lease and transported. GtG™ conversion turns gas into a more valuable and flexible commodity that enjoys many more conventional marketing options. GCC's service is especially important for the growing number of stranded and undervalued gas properties that today already number in the hundreds of thousands. This is a very large, multi-million dollar business opportunity.

GCC's MiniRefinery concept was originally formed in 2008, with design and engineering completed in late 2010. GCC has the sole and specific mission to develop, build, deliver, and operate the MiniRefinery product line for the oil industry market. Today, GCC operates its head office in Oklahoma City, with a laboratory in Houston. GCC's management has invested its own resources to date to ensure the successful implementation of its field service business.

The company has a strategy backed by real capabilities and proven technology that combine to ensure success. **The business strategy focuses on GCC's** portable, skid-mounted, GtG™ processing plant—the MiniRefinery which is a miniaturized refinery. GCC's unique engineering design is optimized to deliver a valuable, petroleum liquid-range liquid that can be flexibly sold as a crude oil, crude oil blending agent, refinery feedstock, condensate, or as natural gas liquids (NGLs). Unlike typical oil field condensate, GCC's product is heavier, more stable, and less volatile.

The company will only manufacture MiniRefinery against signed field service contracts. Unit manufacturing will be performed by Big T Fabricators, an established Oklahoma manufacturer of oil industry processing equipment. GCC will outsource catalyst manufacturing to qualified Oklahoma companies. GCC's day-to-day activities will focus on marketing, overseeing the manufacturing process, and providing field services.

Revenues accrue primarily from a unit rental fee plus a volumetric processing fee. The rental fee is specifically "sized" to service a five-year bank note: this fee goes directly to a dedicated GCC account at the lending Bank. The processing fee pays for the company's administrative and field operations. Other fees earned by GCC include unit servicing charges, catalyst use charges, and incremental fees (labor and mileage) earned during site mobilization and demobilization. This is a revenue model that works—even in the first year GCC is a business with gross profits.

---

## Product Technology

GCC Field Service builds and operates a portable, skid-mounted, natural gas processing unit—the MiniRefinery that converts methane and associated hydrocarbons into petroleum liquid-range liquids. The MiniRefinery weighs approximately 10 tons, measures 20 by 7 feet, and is designed for conventional truck transport and in-field handling by conventional oil field equipment. The skid contains four pressure vessels (reformer, reactor, and two heat exchangers), a vertical separator, water pump, air blower, piping and controls. Gas moves through the system under its ambient pressure, or (if very low pressure) can be forced through via the blower.

The MiniRefinery takes natural gas and associated liquids (ethane, propane, butane, pentane...) and converts these into a blend of heavier liquids forming a 71° API gravity oil. This product is also a light-straight-run petroleum liquid with a 77-octane value. By design, GCC's product can be readily mixed with crude oil; this blending creates a lighter-gravity crude that earns more market value.

**Both the MiniRefinery and its product yield are unique:** no other option currently exists, or is known, that allows gas well operators to convert natural gas into a valuable, easily stored and transported, marketable, liquid commodity at the well site. The unit “fits” the capabilities and mindset of well operators both in cost and in ease of operation. The well’s assigned pumper can monitor the unit’s daily operations. The unit itself requires no intervention: its operation is automatic, and it only has two powered mechanical components—a water pump and a forced-air blower.

## Product Technology Continued

GCC’s technology represents a modified Fischer-Tropsch processing method. Fisher-Tropsch processing was originally developed in the 1930s, and has successfully been implemented by Shell (Malaysia, 10,000 bopd plant), Sasol (most of South Africa’s production for past 40+ years), BP (300 bopd demonstrator plant being built in Alaska), Exxon (former pilot plant in Lake Charles LA, 100,000 bopd plant under construction in Qatar), and Conoco (pilot plant in Ponca City). This proven technology has remained focused on large, world-class gas processing opportunities outside of the US. Only GCC has focused on the small well, stranded gas market that exists and is growing throughout North America.

The FT process is relatively simple: Gas + air + water enter the unit and are burned, atomizing most of the molecules. Next, the molecules are reformed into carbon monoxide + hydrogen + oxygen, and this resulting mix is fed into a reactor containing GCC’s patented catalyst. This proprietary process causes carbon + hydrogen to bond and form hydrocarbon chains; oxygen provides the reaction’s energy. By limiting and controlling the catalytic reaction time span, the lengths of the forming hydrocarbon molecules are controlled and a defined product slate is produced. The entire process is a balance between temperature, pressure and time. GCC’s technology benefits are further explained in the following chart:

### GCC’s Technology Benefits

#### GCC’s Technology

Once-through process  
 Narrow product slate >value  
 Process uses air (no cost)  
 Conventional product sold at the well  
 Portable—scalable—modular  
 Wellhead processing

#### The Competition

Complex recycle loops  
 Broad product slate <value  
 Process uses pure oxygen (expensive)  
 Requires hydrocracking  
 Large, fixed facilities  
 Co-located with refinery

---

## Operational Benefits

GCC has established key relationships to ensure its North American success:

- Working relationship with 5<sup>th</sup> National Bank, n.a. for manufacturing financing,
- Equity investment by Big T Fabricator, capping GCC’s prototype manufacturing cost risk,
- Cooperation with the Oklahoma State Marginal Well Commission,
- Membership in the national Stripper Well Consortium for the specific purpose of seeking Consortium grants and funding,
- Customers identified for first fourteen units,
- New customers continue to contact GCC—all unsolicited—further proving market demand.

**Commercially significant—the client cash-flows within 24 hours of the unit’s arrival on location. From that point onwards, the well operator controls his own cash flow. This represents a radical departure from the current conventional gas market.**

The market for small volume/low pressure gas production has the following characteristics:

- Spot pricing—no long term price predictability or continuity,
- No guarantee of sale—pipeline may shut-in production at its own discretion,
- Gas sales price 75% (*and often even less*) of market price,
- The well operator is hostage to a pipeline: no outlet for gas (can’t store, save, truck it...),
- Selling may require nominations—missing a predicted, nominated volume incurs penalty fees which can reduce or wipe out earnings,

- Changes in gathering system pressure may choke back or shut-out gas entry into a pipeline no sales,
- Compressing low-pressure gas results in gas loss (gas is burned to run the compressor) and compression rental costs...a losing proposition,
- Poor or unpredictable revenues destroy the well's asset value.

## Operational Benefits Continued

Additional market applications:

- Short term rentals establishing incremental revenues while a new well awaits pipeline,
- Short-term rentals during well testing, in lieu of flaring that may be prevented by company policy or government regulation,
- Flare mitigation inside city limits or in jurisdictions where flares are illegal—this is important for associated gas from oil wells that otherwise cannot be produced,
- Alternative reinjection may be too expensive or impractical, especially for smaller volumes,
- For tactical reasons, an operator may lease a MiniRefinery to maintain even the most marginal production, simply to hold a lease—cessation of production often abrogates oil and gas leases.

GtG™ processing also provides some excellent and significant financial benefits that must be considered:

- Shut-in and stranded production cannot be booked as an asset - GCC GtG™ processing allows gas wells to become booked, cash flowing assets,
- Reactivation of stranded production earns severance tax credits,
- Incremental production increases earn severance tax credits,
- Consistent and predictable earnings improve well's asset value.

GCC's business model enjoys a number of significant and distinct advantages. Key factors contributing to GCC's success include the following:

- Low complexity product—easy to maintain—fits the oil field rental model/paradigm,
- The MiniRefinery is a portable solution and is readily moved as opportunities change,
- Flexible paralleling of units offers variable gas volume processing preserving project economics,
- The unit is specifically designed to handle low-pressure gas, typical for depleted production, older fields, coalbed methane reservoirs, and a growing number of other applications.

As a product, the MiniRefinery uses:

- The unit is relatively inexpensive (\$95,000 each) and uncomplicated to manufacture,
- Has no exotic features or unusual characteristics.

From a “green” perspective, GCC's technology is environmentally friendly. GtG™ processing mitigates methane emissions—methane is twenty times more harmful to the atmosphere as a greenhouse gas. Thus, GtG™ processing may in fact earn the operator greenhouse gas tax credits, which may prove to have real value in the near future and could add even more incremental revenues to the operator's cash flow. A new trading industry in greenhouse gas tax credits has already been established in the US. Also, growing state and federal regulatory encroachment today prevents flaring and venting of many methane sources: this works in GCC's favor, as does the emerging international greenhouse gas mitigation framework proposed by the Kyoto Treaty.

---

## Market Definition

GCC currently defines its initial market as the Oklahoma-Texas-Kansas-Arkansas area. According to the Interstate Oil and Gas Compact Commission's Marginal Oil & Gas Report for 2007, the following statistics characterized GCC's local market:

State	National Rank	Marginal Gas Wells	Average Mcfd Produced per Well	No. of Gas Wells Plugged in 2007
Oklahoma	(6 <sup>th</sup> )	13,550	25.6	265
Texas	(4 <sup>th</sup> )	31,018	22.1	1,179

Kansas	(11 <sup>th</sup> )	6,350	32.1	263
Arkansas	(15 <sup>th</sup> )	1,685	23.4	49
Totals:		52,603		1,756

## Market Definition Continued

1) These statistics do not include oil production-associated gas that is flared or vented. This is a real issue and opportunity. A tremendous amount of associated gas is today flared or vented, meaning lost revenues to the operator, royalty owners, and the state.

2) These statistics do not reflect the number or amount of stranded gas that exists, even in mature markets.

Several facts are important to consider regarding these stripper well statistics. First, stripper wells are rarely found alone; typically, these exist in clusters related to a specific field or reservoir. By gathering or linking four or more wells together, an economically significant amount of gas can be converted into oil.

Attached as an appendix is a letter from the Executive Director of Oklahoma’s Commission for Marginally Producing Oil & Gas Wells, in which she states that “...we feel that this [GCC’s] technology is very important to the oil and gas producing industry in Oklahoma. Many wells produce volumes of natural gas that for different reasons are not marketable to gas pipelines. This gas is referred to as stranded gas. There are approximately 117,000 producing wells in Oklahoma, many of which are producing [venting or flaring] or have the capability of producing stranded gas. It is literally a commodity that is being wasted at large volumes in Oklahoma.”

GCC continues to identify >200 Mcfd-sized stranded gas opportunities in Oklahoma and North Texas. The company forecasts that these properties will continue to appear or become identified by GCC in the local Oklahoma-Texas-Kansas-Arkansas market at a consistent rate of one hundred per year, meeting GCC’s growth goal. Nationally, the opportunity is driven by closing gas pipeline gathering systems, and by growing legal restrictions against flares and venting already in place in California (with 422 marginal gas wells) and New York (5,530 wells), and in other states.

The key to attracting the business is market exposure. This is already being provided—at no cost to GCC—by the Oklahoma Marginal Well Commission. Significantly, GCC is getting effective “word of mouth” endorsement by pending customers and by industry proponents. To date, GCC’s customer base has developed solely by this method, which already yields new opportunities at an average rate of 2 to 3 monthly.

The customer base is of stronger size to maintain projected sales growth and demand. Nationally, there are some 2,500 operating companies that form the oil and gas upstream (exploration & production) sector. GCC’s customers are the owners of these mostly small independent production companies

## Competitive Analysis

GCC has no current or anticipated competitors to its MiniRefinery product. The company plans to patent the MiniRefinery design to retard the appearance of “me too” competition. Mitigating factors against early direct competition include the decline in the overall number of oil industry service companies, and the significant investment in time and resources needed to develop a functional unit. The following chart shows existing competition in the form of indirect competitors that offer skid-mounted, portable, gas well services.

Company	Product Produced	Technology Ready	Feasible Economics	Notes
GCC	Gasoline/Diesel	Yes	Yes	Field in 2011
Synfuel	Pentane	No	No	Expensive + Dangerous
Synergy	Diesel	No	No	Chapter 11 (2008)



Blue Star	Electricity/Diesel	Unknown	No	Fuel Cell Oriented
GTI	LNG	No	No	Cryogenic LNG at the wellhead, No supporting logistical infrastructure

## Competitive Analysis Continued

GCC's existing competition comes from substitute technologies that fail to approach GCC's economics. The most common solution for small gas wells and low volume production has been the addition of gas motors driving electrical generators. The limitation with this approach appears within the MiniRefinery range of operations: the small amounts of electricity generated by low-volume, low-pressure gas is too small to sell. Utilities that might buy the production often impose restrictive delivery terms, and require power conditioning that is uneconomical for small generator facilities. In rural locations, the demand for the power may not even exist, line loss during transmission may exceed the value, or the infrastructure creation required may prove uneconomical (i.e., costs for new power lines and poles, switch gear, etc...). Also, if the small quantities of power being generated are located at the end of the power system, it is often impossible to send the voltage back up the line. The final problem—and a very real problem—is the theft of small generators from remote well locations

The major oil companies have competitive FT technology; however, this is applied by their refinery groups in large scale applications. The majors have largely pulled their operations out of the US, and utilize contractors exclusively for most in-field production operations. GCC's approach contrasts significantly by producing a flexible product with broad applications that clearly fits the existing, conventional oil field production, transportation, and marketing infrastructure.

## Market Positioning

GCC has developed a marketing strategy that fits existing oil field practices. Its unit is available as a leased piece of equipment. Costs to the operator are reasonable, and allow a good earnings return on gas production. The value and financial impact for the operator is significant, as illustrated in the following table:

Daily Flow (Mcf/d)	Prior Revenues pre-GCC CC	Monthly Gross with MicroUnit™	Monthly Net Revenues to Client	Monthly Barrels of Oil Produced	Cost to Make Each bbl
150	\$0	\$11,438	\$ 7,747	457	\$ 8.07
200	\$0	\$15,249	\$10,987	610	\$ 6.99
250	\$0	\$19,062	\$14,228	762	\$ 6.34

**The important difference between GCC and alternative power generation is that within 24 hours of arrival on location, the MiniRefinery is generating cash flow for the operator.** The operator sees an immediate benefit and return on his investment.

It is significant that GCC can go “head-to-head” with pipeline sales. The price differential with natural gas favors GCC for low-pressure, low-volume wells that have existing 70% or lower net gas contracts.

The most important benefit to the operator is that a MiniRefinery *keeps the production on the lease*, and within the operator's total control. This removes tremendous uncertainty and unpredictability from the operator's business. There is considerable value in the fact that GCC gives the operator predictable and consistent daily production and sales from a gas well.

## Business Financial Model

GCC's marketing goal is to minimize its targeted market penetration to ensure that its assets are matched against the largest existing opportunities. This means that by targeting far less than 2% of the existing market, GCC can afford to be choosy regarding the opportunities that it takes. The company intends to exploit its first-in-the-market advantage by earning the largest processing fees available. GCC will do

this by signing the highest volume contracts first. Currently 80% of GCC's identified opportunities are 250 Mcfd contracts. The company will continue to focus its marketing effort on +200 Mcfd-sized deals. This strategy means that smaller clients may be willing to pay higher fees to gain access to GCC's equipment.

## Business Financial Model Continued

GCC Field Service is a production contractor, providing leased gas conversion services to gas well operators. The established oil field model for production contractors like GCC is to lease equipment for fixed rental prices, and to charge incremental costs as appropriate. GCC does this by charging a fixed rental price for the unit, plus a separate volumetric (i.e., per-Mcf) processing fee. GCC has an internal strategy for segregating its income into (1) rental fees, and (2) processing fees. The resulting model is simple to understand, and provides predictable and distinct revenues for GCC and its bankers:

- 1. Rental fees** are fixed and set at a rate that services a five-year bank note that pays for the unit's manufacture. The monthly rental fee is paid directly to an escrow account, giving the bank assurance regarding loan service and repayment.
- 2. The processing fee** is a use fee charged for "wear and tear" and is assessed on a per-Mcf basis—the more the equipment is used, the higher the processing fee incurred. Processing fees are assessed from end-of-month meter readings then billed during the following month, with 30-day net terms. Thus, the processing fee collection cycle fits well within a 90-day quarter.

In accordance with oil industry practice, operators pay additional fees that include:

- a one time deposit upon signing the Field Service Contract;
- mobilization and demobilization costs, to include site preparation and cleanup; and
- repairs made to the unit during leasing, to include catalyst servicing charges.

Therefore, GCC's operating budget does not have to carry a contingency for repairs or servicing since these costs are borne by the operator. GCC's Field Service Contract is included as an annex to this business plan.

Once on-location and brought into operational parameters (all occurring within 24 hours), ongoing operation of the unit can be performed by the operator's field personnel. GCC is called for service only if the unit shuts down, which happens automatically if any system falls out of operating parameters.

---

## Market Growth

GCC's goal is to scale the company up to an annual build of 100 units. This will be done methodically:

<u>Year</u>	<u>Goal / Activity</u>
2011-2012	Build 10 units qtrly, perfect mfg & quality control, gain field experience.
2013	Expand manufacturing to 100 units annually.
2014-2015	Expand regionally to 445 units. Business now includes moving existing units, and typical sites are often multi-unit installations. Special focus on lease contract management. President's focus shifts to strategic markets and business relationships.

GCC's business reflects conservative growth estimates based upon winning less than 2% of the existing market in the local four-state region. The plan involves starting with a core staff, getting the business model right, and then expanding into a regional company with a steady growth rate.

As it is, expanding to >150 units annually will require two or three manufacturers: this allows construction in parallel, and reduces manufacturing risk. Continued use of contract manufacturing via Big T Fabricator leaves GCC with flexibility without an expansion in overhead, and in a safer position to survive market fluctuations. Additional growth or unexpected demand may require selection of even more additional manufacturing contractors, as well as expansion of banking relationships. For GCC's purposes, there are 12 qualified manufacturing contractors in or between Tulsa and Oklahoma City.

Marketing will be focused on industry groups and through related media and government agencies. GCC has entered into a cooperative relationship with DOE's Idaho National Energy and Environmental Laboratory (INEEL) whereby INEEL will take the lead for marketing GCC's technology into the Federal marketplace. GCC is an industrial partner with EPA's Landfill Methane Outreach Program (LMOP) and has entered into a technology demonstration MOU with a waste management company for recovery of

## Market Growth Continued

landfill gas (LFG). There are numerous other venues for exposing and promoting GCC's product, and significantly, all of these are free. Most importantly, this process has already begun.

GCC's market entry plans are currently underway. Five operators with requirements for fourteen units have already been identified and qualified. GCC's plan is to increase this backlog to 20 units during the first six months of 2011. Upon delivery and subsequent testing of the first MicroUnit™, GCC will then embark on multiple-unit builds (10 per purchase order).

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Totals</u>
Sales Target by Units						
Leased	25	75	125	150	175	<b>550</b>
Delivered	20	50	100	125	150	<b>445</b>

Multiple unit construction gains GCC approximately 10% in materiel cost savings, providing an incremental savings in capital equipment (product) cost. First units will be delivered within a four to five hour distance from Oklahoma City, allowing same-day turnaround on site and field service visits.

---

## Sales Approach and Proposition

GCC's growth targets a consistent growth rate of 25 units quarterly. Sales are achieved by getting customers to sign Field Service Contracts. The primary job of the company's president is marketing and sales. Additionally, GCC will contract for district superintendents with assigned responsibilities that include growing their own districts. This means that the district superintendent will have direct responsibility for unit leasing and market lead development. As experienced field production supervisors with several decades of experience within their managed districts, these district superintendents will be uniquely positioned to represent and sell GCC's services. Because district superintendents' earnings are based upon a fee of \$200/unit/month, they have a built-in incentive to increase the number of units supervised. Superintendents who can grow the business thus become self-selecting and self-promoting.

The company's goal is to have the maximum number of units processing at the maximum daily volume (250 Mcfd); this would increase processing fee earnings by a further 25%. . During the past two months, GCC has begun qualifying initial customers for the 2<sup>nd</sup> half of 2011. Results of this eight week, part-time marketing effort are seven companies needing 14 units, with 80% utilized at the maximum processing rate of 250 Mcfd. The market is ready.

The typical sales cycle lasts one month, and involves an initial sales presentation. This is followed by the potential customer's review of the Field Service Contract. During the review, GCC may be asked to provide economics and supporting technical information, and to evaluate gas chemistry to make a final determination regarding yield. Within a month, a leasing decision will be made.

---

## Management

### Chairman and Chief Technology Officer

Mr. David Doe, PhD

- 2007-Present - Co-founder and Chairman of GCC Ltd., responsible for the continued development of GCC's proprietary GtG™ technology.
- 1995-2007 - President of the Petroleum & Gas Recovery Institute, an international oil and gas production technology institute with 14 member countries.

- 1973-1995 - Big Chemical Research, Inc. and Market Applications Chemist with 13 years experience in basic R&D, then moving into marketing where he developed new products for existing customers, or modified existing Big Chem products.
- Hall of Fame Member of the International Institute of Chemistry.
- Proven management and marketing executive with demonstrated world-class oil & gas expertise.

## Management Continued

### President

Mr. John Smith

- 2009-Present. President of GCC Ltd., leading the company's operations, marketing/project development, and engineering efforts to commercialize Dr. Doe's patented gas-to-petroleum liquid catalyst.
- 2000-2009. President of Red Russia Ltd and MidContinent District Manager for Empire Energy Inc. Managed E&P program in Russia that included six exploration wells and two new field discoveries. US responsibilities included management of 18 properties in four states, with 13 production personnel reporting directly to him; increased oil (30%) and gas (20%) production in district, performed geological studies, managed engineering evaluations, and reviewed other Castle properties and projects outside of District.
- 1997-2000. Founder & President of Red Russia Energy Inc. Took company public, negotiated 12 million acres of oil and gas concessions in Eastern Europe, managed 40 employees, made two new field discoveries and one successful field re-entry. Sold the company to Empire Energy.
- 1985-1997. Company Marketing Director, Newmetric Inc. Directed marketing for the world's largest privately owned GPS firm, winning \$55 million in new contracts over a four year period.

### Vice President/COO

Mr. Bill Operations

- Vice President for GCC since 2010, responsible for company administration and operations, as well as marketing and operations concept development for the MicroUnit™.
- 2009. Consulting oil field service contractor providing site management, maintenance, production, and remediation services.
- 1997-2009. Founder, owner and Managing Director of Property Services, Inc., a privately held properties service contractor in North America.
- 1978-1997. International programs manager for the US Army, serving in 4 countries as an advising logistician, construction project manager, and conducted business-oriented evaluations of foreign military programs. Bill's experience included ten years in petroleum management, and included two oil company related projects in Latin America (Amoco and the National Oil Company of Guatemala).

### Interim CFO

John Public, CPA, CFO Contractors

- Serving on an as-needed CFO basis until venture can justify a full time CFO.

**Three key hires** – All presently providing contract services and have committed to full time employment.

Mr. Bob Builder is slated to be GCC's Manager for Manufacturing and Quality Control. He has more than twenty years of experience in the fabrication of high-pressure vessels. He is currently the Sr. Estimator for Broadscope Inc., a top pressure value manufacturer for the oil industry. Mr. Builder brings in-depth and extensive knowledge regarding the design, materials & metallurgy, tolerances, ASME specifications, costs, for constructing equipment like the MicroUnit™. He also brings extensive and relevant industry contacts and relationships to GCC that will prove essential to the company's efforts to maximize value and minimize.

Mr. Bruce Catalyst will be GCC's Manager for Field Operations performing pre-mobilization site surveys, and supervising MiniRefinery delivery. Mr. Catalyst has been involved with the MiniRefinery concept, design and development the unit's operating procedures. He has extensive

knowledge of pumps, motors, compressors, blowers, related electrical systems, piping, materials, performance and loading tolerances, OSHA safety standards and requirements.

Mr. Russell Service is slated to be GCC's first District Superintendent, and he will manage the North Texas and Oklahoma Panhandle region. Mr. Service has worked as a pumper and field superintendent of oil and gas production for over twenty-five years. Mr. Service has extensive knowledge of well-site and field level production equipment, gas well operations and characteristics, and an in-depth understanding of the rules and regulations that cover oil and gas production operations. Mr. Service has already begun identifying qualified customers for GCC.

## **Management Continued**

The company's strength is found in the multi-talented and in-depth experience of its team. No one is under the age of 40, and everyone has at least several decades of proven, successful, and relevant experience.

GCC presently has no outside board members. It is GCC's intent to invite one or more investors and outside experts as additional board members in addition to advisory board members.

GCC will never be a labor-intensive company; rather, it will maintain its core management team, complemented by experienced regional managers hired for their local reputation and knowledge. Because the company's business model is uncomplicated—one product / one market—the equipment and issues are repetitive and redundant. Field operations and equipment mobilization closely model the team's oil industry experience, and are highly relevant to military logistics and movements, in which GCC's core team has uniquely specific and extensive experience. Management believes that it has the expertise and experience to grow GCC through its first five years. Additional hires are projected for 2012, and include a property manager, receivables clerk, secretary, and additional district managers as the business grows.

---

## **Product Validation Phase / Beta Test with Revenue**

GCC is ready to manufacture its first MiniRefinery. Furthermore, the company is ready to implement field operations within the first year. To this end, GCC has been functioning as a business, and investing its resources specifically in this opportunity.

This is further defined by the following bullets, which describe activities and operations already completed:

- ✓ Business organization is in place, up and running:
  - ✓ OKC office, Canadian laboratory leased, equipped + furnished
  - ✓ Oklahoma company registered, EIN issued, DUNS registered
  - ✓ Website established, domain name granted "GCCltd.com"
- ✓ Engineering has begun, with the following achieved:
  - ✓ Detailed process assumptions defined
  - ✓ Preliminary process engineering finished
  - ✓ MiniRefinery preliminary mechanical design completed
  - ✓ MiniRefinery components list completed, with preliminary costing
  - ✓ Big T Fabricator in place to manufacture commercial units, and to pay all costs associated with engineering, design, fabrication, certification, and testing of Beta Unit.
- ✓ Marketing has begun:
  - ✓ MiniRefinery brochure and sales presentation prepared
  - ✓ Field Service Contract written, reviewed, and approved
  - ✓ First customers have been identified, initial meetings held, unit numbers/level of demand defined, GCC's pricing and price strategy confirmed, and technology comments and performance recommendations canvassed (proving GCC's initial unit design and performance assumptions)
  - ✓ Working relationship with State Marginal Well Commission and DOE INEEL
  - ✓ Technology demonstration project formed with Waste Management Inc. for LFG
  - ✓ Independent geologists recruited as key influencers and for leads

- ✓ More than a dozen operators already briefed
- ✓ Financial resources have been identified:
  - ✓ Banking relationship with Oil Bank, n.a. in place, GCC CC approved for lending purposes, key bank executive understands and supports business model
  - ✓ State Grant Proposal prepared and submitted for \$100,000 to finalize catalyst system design
  - ✓ Stripper Well Consortium eligibility established for \$150,000 grant of additional project financing for construction of second unit

## Product Validation Phase / Beta Test with Revenue Continued

GCC is now poised to proceed with its Beta Test that involves the construction of its first MiniRefinery, and its commercial test at a revenue yielding site. This unit will provide a test-bed for validating performance assumptions. Implementation issues and requirements are defined in the following bullets:

- **RESEARCH & ENGINEERING.** Laboratory work needs to be completed that provides final engineering and process verification, with a detailed final design of the unit's components.
- **MECHANICAL ENGINEERING & DESIGN.** Concurrently, mechanical engineering will proceed with confirming the unit's preliminary design, to include preparation of mechanical drawings for components, final cost verification, and final fabricator selection.
- **UNIT CONSTRUCTION.** The MiniRefinery contains 15 systems and 742 individual components (mostly off-the-shelf). Construction time for a MicroUnit™ will last about four weeks. The company's goal is to build in 10 unit blocks, thereby earning 10% in overall material and component discounts.
- **PROJECT BUSINESS MODEL.** GCC's design goal has been use of non-exotic, commonly available materials and components. There is no inherent need to stockpile critical parts or scarce equipment, except for stainless steel pipe. The manufacturing process is keyed against a signed Field Service Contract.

Regarding project implementation: GCC's business is inherently national in scope, with marginal gas production currently reported in 28 states. This is a year-round business that has constant demand for services 365 days a year. The MiniRefinery has a designed 25-year life, though the cooling pump and blower will have shorter rebuild cycles. Overall, the business represents a solid play in a relatively huge market, with a distinct absence of competition, and a significant demand for GCC's technology and services.

## Financials

### GCC Financials – Overview (000's)

	2011	2012	2013	2014	2015
Revenues	682	2,662	7,082	13,662	21,730
Cost of Goods	111	1,065	2,854	5,577	8,921
<b>Gross Profit</b>	<b>570</b>	<b>1,597</b>	<b>4,228</b>	<b>8,084</b>	<b>12,808</b>
Operations/G&A	1,011	1,394	2,801	3,853	5,238
<b>Net Profit</b>	<b>-440</b>	<b>202</b>	<b>1,426</b>	<b>4,231</b>	<b>7,570</b>

Business planning assumptions include a build rate of up to 20 units quarterly for months 7-18, rising to 25 units for months 19-30, and then >50 per quarter thereafter. The average daily processing rate per unit used was 200 Mcfd. Units are used everyday of the year, and there is no down-time figured in. The catalyst use fee is \$40 per pound. Bank notes activate after 90 days—5 year notes at 7% interest.

GCC's financials define a business with consistent growth in revenues and retained earnings. Revenues double in most years—this is generally true for retained earnings, as well. The company's plan for the first five years yields more than \$27 million in gross profits with over \$89 million in asset value.

---

## Venture & Investment Risk

The biggest risk associated with investing in GCC is beta testing might prove the technology needs further work, the catalyst needs modification and actual field operations may not meet the assumed economical benefit levels anticipated. Each could result in additional time or funding needs and ultimately result in lower than projected revenues and earnings potential.

---

## Terms

Investment Funds Sought:		\$ 500,000
Equity Stake in Gas Conversion Company:		25%
Anticipated/Applied Funding Opportunities:	Government Grants	\$ 150,000
	State Awards	\$ 100,000
<hr/>		
Total:		\$ 750,000

---

## Use of Funds

\$250,000	<b>MiniRefinery Final Design &amp; Engineering</b>
	\$100,000 laboratory equipment
	\$100,000 salaries
	\$ 50,000 lab operations + G&A
\$250,000	<b>Company Operations</b>
	\$200,000 salaries
	\$ 50,000 company operations + G&A

---

## Exit Strategies

GCC anticipates an M&A opportunity for the company between the end of the 4<sup>th</sup> to 5<sup>th</sup> year of operations. The company believes that it will be a prime candidate for acquisition by one of the major oil field service companies (Baker Hughes, Halliburton, Schlumberger, BJ, Hanover...). GCC currently targets this for year five (2015), when the company's combined earnings, asset value, and business value would produce the greatest business valuation. Timing for M&A activity will depend upon the general health of the energy industry, the outlook for the energy sector at that time, and the state of the general economy.

However, there are trends that will also make GCC an attractive acquisition:

- Faster than anticipated decline in national gas production, which would close many regional and local gas gathering systems at an even faster rate.
- Further consolidation of the oil industry, further shrinking business opportunities as service companies look for new incremental business gains.
- An unreasonable environmental group attack on the existing oil producing industry which would rapidly increase environmental pressures upon the remaining domestic energy industry. GCC's technology is "green" and would provide an effective vehicle for meeting methane emissions reduction requirements.

---

## Estimated ROI

At 4.5 X EBIDAT this would produce a future value between \$20 million to \$35 million generating a return to investors of 10 X 1 to 17.5 X 1.