

## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #101

# Health Care Facility (Hospice)

### LOCATION:

Jacksonville, Florida

### PRIME MOVER and PROCESS:

Cummins KTA-19 diesel  
engine-driven generator

### SERVICE:

Stand-by

### GENERATOR RATING:

350kW

### ENGINE SPEED and GENERATOR FREQUENCY:

1800RPM/60Hz

### GTI BI-FUEL® KIT:

Series II-A16

### INSTALLATION DATE:

October, 2004



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## Waste Water Treatment Facility

**LOCATION:**

Fayetteville, Arkansas

**PRIME MOVER and  
PROCESS:**

Caterpillar 3516B diesel  
engine-driven generator

**SERVICE:**

Peak shaving

**GENERATOR RATING:**

2000kW

**ENGINE SPEED and  
GENERATOR FREQUENCY:**

1800RPM/60Hz

**GTI BI-FUEL® KIT:**

Series IV-B27

**INSTALLATION DATE:**

June, 2005



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #103

# Waste Water Treatment Facility

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**LOCATION:**

Atlanta, Georgia

**PRIME MOVER and  
PROCESS:**

Caterpillar 3516B diesel  
engine-driven generator

**SERVICE:**

Stand-by

**GENERATOR RATING:**

2000kW

**ENGINE SPEED and  
GENERATOR FREQUENCY:**

1800RPM/60Hz

**GTI BI-FUEL® KIT:**

Series IV-B27

**INSTALLATION DATE:**

April, 2005



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #104

# Financial Institution

### LOCATION:

Fort Walton Beach, Florida

### PRIME MOVER and PROCESS:

Caterpillar 3412 diesel  
engine-driven  
generator

### SERVICE:

Stand-by

### GENERATOR RATING:

500kW

### ENGINE SPEED and GENERATOR FREQUENCY:

1800RPM/60Hz

### GTI BI-FUEL® KIT:

Series II-A16

### INSTALLATION DATE:

June, 2005



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #105

# Correctional Facility (Prison)

### LOCATION:

Miami, Florida

### PRIME MOVER and PROCESS:

Cummins KTA-38 diesel  
engine-driven  
generators

### SERVICE:

Stand-by

### GENERATOR RATING:

750kW (2250kW total)

### ENGINE SPEED and GENERATOR FREQUENCY:

1800RPM/60Hz

### GTI BI-FUEL® KIT:

Series III-C26  
(three engines)

### INSTALLATION DATE:

June, 2005



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #106

# Health Care Facility (Hospital)

### LOCATION:

Fort Myers, Florida

### PRIME MOVER and PROCESS:

Caterpillar 3516B  
diesel engine-driven  
generators (2)

### SERVICE:

Stand-by

### GENERATOR RATING:

2200kW (4400kW total)

### ENGINE SPEED and GENERATOR FREQUENCY:

1800RPM/60Hz

### GTI BI-FUEL® KIT:

Series IV-B27

### INSTALLATION DATE:

March, 2004



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #107

# Manufacturing Facility (Telecommunications)

### LOCATION:

Sunrise, Florida

### PRIME MOVER and PROCESS:

Detroit Diesel 12V149  
diesel engine-driven  
generator

### SERVICE:

Stand-by

### GENERATOR RATING:

800kW

### ENGINE SPEED and GENERATOR FREQUENCY:

1800RPM/60Hz

### GTI BI-FUEL® KIT:

Series III-B26

### INSTALLATION DATE:

March, 2004



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #108

# Oil & Gas: Offshore Production Facility

### LOCATION:

Indian Ocean  
Off the Coast of India

### PRIME MOVER and PROCESS:

Caterpillar 3508B  
diesel engine-driven  
generators (4)

### SERVICE:

Prime Power

### GENERATOR RATING:

1000kW (4000kW total)

### ENGINE SPEED and GENERATOR FREQUENCY:

1500RPM/50Hz

### GTI BI-FUEL® KIT:

Series III-B26  
(4 engines)

### INSTALLATION DATE:

June, 2005



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #109

# High-Rise Office/Retail Complex

### LOCATION:

Toronto, Ontario Canada

### PRIME MOVER and PROCESS:

Caterpillar D349 diesel  
engine-driven generator

### SERVICE:

Stand-by

### GENERATOR RATING:

800kW

### ENGINE SPEED and GENERATOR FREQUENCY:

1800RPM/60Hz

### GTI BI-FUEL® KIT:

Series III-C26

### INSTALLATION DATE:

March, 2005



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #110

### Office/Retail Complex

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**LOCATION:**

Toronto, Ontario Canada

**PRIME MOVER and  
PROCESS:**

Caterpillar 3512B diesel  
engine-driven generator

**SERVICE:**

Stand-by

**GENERATOR RATING:**

1500kW

**ENGINE SPEED and  
GENERATOR FREQUENCY:**

1800RPM/60Hz

**GTI BI-FUEL® KIT:**

Series IV-B27

**INSTALLATION DATE:**

March, 2005



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #111

# Manufacturing Facility

### LOCATION:

Torreon, Mexico

### PRIME MOVER and PROCESS:

Cummins QST30  
diesel engine-driven  
generators (2)

### SERVICE:

Peak Shaving

### GENERATOR RATING:

800kW (1600kW total)

### ENGINE SPEED and GENERATOR FREQUENCY:

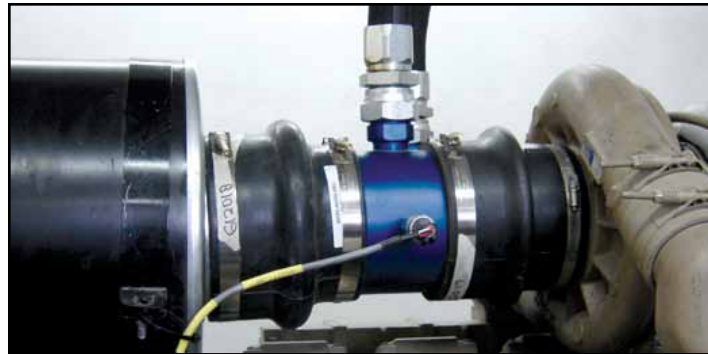
1800RPM/60Hz

### GTI BI-FUEL® KIT:

Series III-C26

### INSTALLATION DATE:

March, 2005



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #112

# Oil & Gas: On-Shore Production Facility

### LOCATION:

Rifle, Colorado

### PRIME MOVER and PROCESS:

Caterpillar 3516B diesel  
engine-driven generator

### SERVICE:

Prime Power

### GENERATOR RATING:

1400kW

### ENGINE SPEED and GENERATOR FREQUENCY:

1800RPM/60Hz

### GTI BI-FUEL® KIT:

Series IV-B27

### INSTALLATION DATE:

March, 2004



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #113

# Distribution Facility (Aircraft Parts)

### LOCATION:

Miami, Florida

### PRIME MOVER and PROCESS:

Mitsubishi S16R-PTA  
diesel engine-driven  
generator

### SERVICE:

Stand-by/Load Control

### GENERATOR RATING:

1600kW

### ENGINE SPEED and GENERATOR FREQUENCY:

1800RPM/60Hz

### GTI BI-FUEL® KIT:

Series IV-B26

### INSTALLATION DATE:

June, 2003



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #114

### Hotel

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**LOCATION:**

Plantation, Florida

**PRIME MOVER and  
PROCESS:**

Mitsubishi S6R-PTA  
diesel engine-driven  
generator

**SERVICE:**

Stand-by

**GENERATOR RATING:**

500kW

**ENGINE SPEED and  
GENERATOR FREQUENCY:**

1800RPM/60Hz

**GTI BI-FUEL® KIT:**

Series II-A26

**INSTALLATION DATE:**

May, 2002



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #115

# Utility Peaking Facility

### LOCATION:

Moses Lake, Washington

### PRIME MOVER and PROCESS:

Mitsubishi S12RS16R  
diesel engine-driven  
generators

### SERVICE:

Peak Shaving

### GENERATOR RATING:

60MW

### ENGINE SPEED and GENERATOR FREQUENCY:

1800RPM/60Hz

### GTI BI-FUEL® KIT:

Series IV (30 units)

### INSTALLATION DATE:

January, 2002



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #116

### Office Complex

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**LOCATION:**

Chatham, Ontario, Canada

**PRIME MOVER and  
PROCESS:**

Detroit Diesel

MTU 16V4000

**SERVICE:**

Standby

**GENERATOR RATING:**

2000kW (2MW)

**ENGINE SPEED and  
GENERATOR FREQUENCY:**

1800RPM/60Hz

**GTI BI-FUEL® KIT:**

Series IV-B46

**INSTALLATION DATE:**

November, 2005



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #117

# Oil & Gas: On-Shore Under-Balanced Drilling Facility

### LOCATION:

Sharjah  
The United Arab Emirates

### PRIME MOVER and PROCESS:

Cummins QSK-19  
diesel engine-driven  
compressors (4)

### SERVICE:

Natural Gas Compression

### GTI BI-FUEL® KIT:

Series IIA-16  
(4 units total)

### INSTALLATION DATE:

November, 2004



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## Manufacturing Facility (Chemicals)

**LOCATION:**

Nandesari,  
Vadodara, India

**PRIME MOVER and  
PROCESS:**

Cummins KTA-3067-G  
diesel engine-driven  
generator

**SERVICE:**

Prime Power

**GENERATOR RATING:**

800kW

**ENGINE SPEED and  
GENERATOR FREQUENCY:**

1500RPM/50Hz

**GTI BI-FUEL® KIT:**

Series III-D26

**INSTALLATION DATE:**

June, 2005



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## Manufacturing Facility (Textiles)

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**LOCATION:**

Ankleshwar,  
Gujarat, India

**PRIME MOVER and  
PROCESS:**

Cummins KTA-19-G4  
diesel engine

**SERVICE:**

Prime Power

**GENERATOR RATING:**

350kW

**ENGINE SPEED AND  
GENERATOR FREQUENCY:**

1500RPM/50Hz

**GTI BI-FUEL® KIT:**

Series IIA-15

**INSTALLATION DATE:**

March, 2005



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #120

# Manufacturing Facility (Ceramic Tile)

### LOCATION:

Bahadurgarh,  
Haryana, India

### PRIME MOVER and PROCESS:

Caterpillar 3515 TA  
diesel engine-driven  
generator

### SERVICE:

Stand-by

### GENERATOR RATING:

1200kW

### ENGINE SPEED AND GENERATOR FREQUENCY:

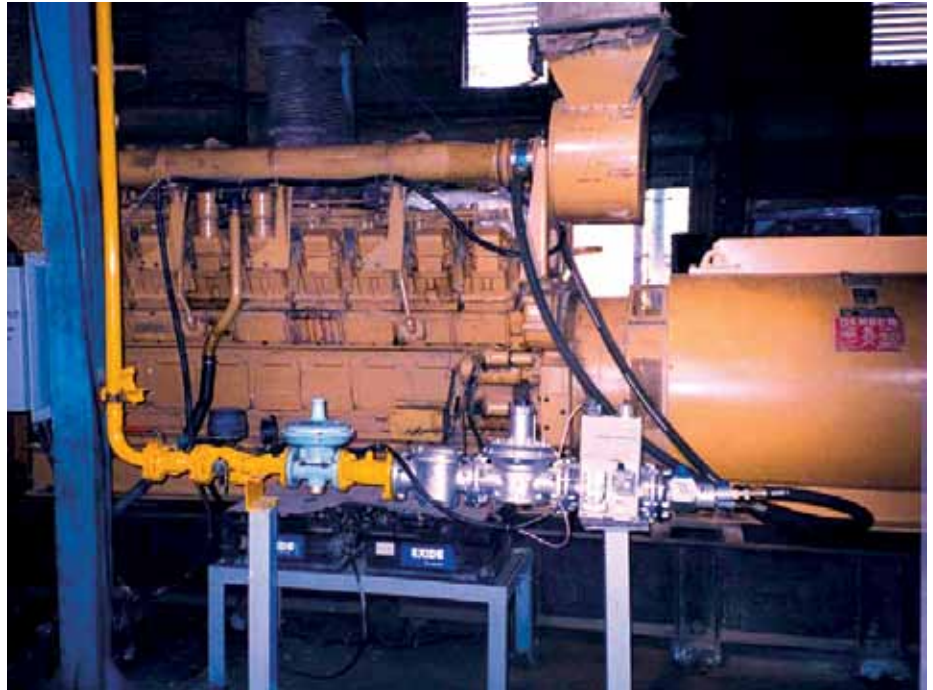
1500RPM/50Hz

### GTI BI-FUEL® KIT:

Series IV-B27

### INSTALLATION DATE:

June, 2005



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## Oil & Gas: On-Shore Production Facility

**LOCATION:**

Russia, “Krapiva Site”,  
Western Siberia

**PRIME MOVER and  
PROCESS:**

Cummins KTA50-G3  
diesel engine-driven  
generators (9)

**SERVICE:**

Prime Power

**GENERATOR RATING:**

800kW  
(7000kW total)

**ENGINE SPEED and  
GENERATOR FREQUENCY:**

1500RPM/50Hz

**GTI BI-FUEL® KIT:**

Series III-C26  
(9 engines)

**INSTALLATION DATE:**

August, 2004 (7)  
June, 2005 (2)



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## Oil & Gas: Onshore Production Facility

**LOCATION:**

Tiquino, Ecuador

**PRIME MOVER and  
PROCESS:**

Caterpillar D-3512 and  
D-3512B diesel engine-  
driven generators

**SERVICE:**

Prime Power

**GENERATOR RATING:**

1085/1470kW

**ENGINE SPEED and  
GENERATOR FREQUENCY:**

1500RPM/50Hz

**GTI BI-FUEL® KIT:**

Series IV-C26  
(2 engines)

**INSTALLATION DATE:**

January, 2006



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #123

# Oil & Gas: Xinjiang Project

### LOCATION:

Xinjiang, China

### PRIME MOVER and PROCESS:

Caterpillar 3512A diesel  
engine-drive generator

### SERVICE:

Prime Power

### GENERATOR RATING:

980kW

### ENGINE SPEED and GENERATOR FREQUENCY:

1500RPM/50Hz

### GTI BI-FUEL® KIT:

Series III-C26

### INSTALLATION DATE:

October, 2009



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #124

# NASA Stennis Space Center

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### LOCATION:

Hancock County, MS

### ENGINE:

(2) CAT C-18

### KW RATING:

500kw Generators

### GAS SUBSTITUTION:

55%

### GTI BI-FUEL® KIT:

Series II-B26



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #125

# Oil & Gas: Yiwu Zhonggao Project

### LOCATION:

Yiwu, China

### PRIME MOVER and PROCESS:

MTU12V2000 (2 sets)

### SERVICE:

Prime Power

### GENERATOR RATING:

580kW

### ENGINE SPEED and GENERATOR FREQUENCY:

1500RPM/50Hz

### GTI BI-FUEL® KIT:

Series III-C26

### INSTALLATION DATE:

January, 2010



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #126

# City of Wichita Water Department

### LOCATION:

Wichita, Kansas

### ENGINE/GENERATOR:

(4) CAT 3516C diesel engine-driven generators

### SERVICE:

Standby Generator

### GAS SUBSTITUTION:

55% (AVG)

### GTI BI-FUEL® KIT:

Series IV-B27

### DISTRIBUTOR/DEALER:

Foley Equipment Company

To extend the run time of their generators during emergencies, the City of Wichita had GTI Bi-Fuel® systems installed on four Cat 3516C generators. The average gas substitution was 55% and NO was reduced by 55% at 78% engine load. A spokesman for the facility stated that a new project may take place in 2012, and added, "We are happy with the gas substitution rate and the engine performance."



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #127

# Commercial

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### LOCATION:

Calgary, Alberta, Canada

### ENGINE:

John Deere 6090H  
Tech-Plus (VGT)

### kW RATING:

250kW

### GAS SUBSTITUTION:

65% @ 30-75% load

### GTI BI-FUEL® KIT:

Series I-A15

### COMMISSIONED:

February, 2009



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #128

# Oil & Gas: EnCana – Chinook Drilling

### LOCATION:

Fort Nelson,  
British Columbia,  
Canada

### ENGINE:

John Deere 6068H

### SPEED/FREQUENCY:

1800rpm @ 60Hz

### PROCESS:

Diesel engine-driven  
generator

### RATING:

168kW

### INSTALLED:

January, 2009

### GTI BI-FUEL® KIT:

Series I-A15



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #129

David Reynolds

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### LOCATION:

Colly Blue, NSW,  
Australia

### APPLICATION:

Crop Farming

### ENGINE:

Cummins M11-C;  
down-hole well pump

### ENGINE POWER:

300hp

### GAS SUBSTITUTION:

70%

### GTI BI-FUEL® KIT:

Series I-A15



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #130

### Residential

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**LOCATION:**

Orem, Utah

**ENGINE:**

CAT 3456

**RATING:**

500kW

**GAS SUBSTITUTION:**

65%

**GTI BI-FUEL® KIT:**

Series II-A16



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #131

### Pertamina AOT Oil & Gas

**LOCATION:**

Prabumulih, Barat  
(Sumsel), Indonesia

**ENGINE/GENERATOR:**

CAT 3406TA  
diesel engine-driven  
generator

**SERVICE:**

Prime Power

**RATING:**

300kVA

**ENGINE SPEED AND  
GENERATOR FREQUENCY:**

1500RPM/50Hz

**GTI BI-FUEL® KIT:**

Series I-A16

**DISTRIBUTOR/DEALER:**

PT. Sigma Kreasi  
Instrument (PT. SKIns)

**INSTALLATION DATE:**

December, 2006



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #132

# Pertamina Oil & Gas

### LOCATION:

Pertamina, Ogan 25  
(Sumsel), Indonesia

### ENGINE/GENERATOR:

CAT 3412TA  
diesel engine-driven  
generator

### SERVICE:

Prime Power

### RATING:

380kVA

### ENGINE SPEED AND GENERATOR FREQUENCY:

1500RPM/50Hz

### GTI BI-FUEL® KIT:

Series I-A16

### DISTRIBUTOR/DEALER:

PT. Sigma Kreasi  
Instrument (PT. SKIns)

### INSTALLATION DATE:

April, 2008



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #133

# Mega Mall Retail Complex

### LOCATION:

Pluit-Jakarta Utara,  
Indonesia

### ENGINE/GENERATOR:

Mitsubishi S16R  
diesel engine-driven  
generator

### SERVICE:

Peak Shaving

### RATING:

1530kVA

### ENGINE SPEED AND GENERATOR FREQUENCY:

1500RPM/50Hz

### GTI BI-FUEL® KIT:

Series IV-B47A

### DISTRIBUTOR/DEALER:

PT. Sigma Kreasi  
Instrument (PT. SKIns)

### INSTALLATION DATE:

May, 2007



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #134

### PT. Yamaha Motor Indonesia Mfg.

**LOCATION:**

Pulogadung, Indonesia

**ENGINE/GENERATOR:**

Cummins KTA38-G5  
diesel engine-driven  
generator

**SERVICE:**

Prime Power

**RATING:**

1000kVA

**ENGINE SPEED AND  
GENERATOR FREQUENCY:**

1500RPM/50Hz

**GTI BI-FUEL® KIT:**

Series III-B26

**DISTRIBUTOR/DEALER:**

PT. Sigma Kreasi  
Instrument (PT. SKIns)

**INSTALLATION DATE:**

May, 2008



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #135

### PT. Pelita Enamelware Industry

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**LOCATION:**

Cikande, Indonesia

**ENGINE/GENERATOR:**

Mercedes OM444LA  
diesel engine-driven  
generator

**SERVICE:**

Prime Power

**RATING:**

500kVA

**ENGINE SPEED AND  
GENERATOR FREQUENCY:**

1500RPM/50Hz

**GTI BI-FUEL® KIT:**

Series III-B26

**DISTRIBUTOR/DEALER:**

PT. Sigma Kreasi  
Instrument (PT. SKIns)

**INSTALLATION DATE:**

September, 2008



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #136

### Pearl Oil

**LOCATION:**

Mengopoh, Jambi,  
Indonesia

**ENGINE/GENERATOR:**

Cummins GSK23-G3  
diesel engine-driven  
generator

**SERVICE:**

Prime Power

**RATING:**

875kVA

**ENGINE SPEED AND  
GENERATOR FREQUENCY:**

1500RPM/50Hz

**GTI BI-FUEL® KIT:**

Series III-C26

**DISTRIBUTOR/DEALER:**

PT. Sigma Kreasi  
Instrument (PT. SKIns)

**INSTALLATION DATE:**

January, 2006



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #137

# CNPC - International Aktobe Petroleum

### LOCATION:

Munai She,  
Aktobe, Kazakhstan

### ENGINE/GENERATOR:

Volvo Penta  
(TAD 1241 GE)

### SERVICE:

Standby Power

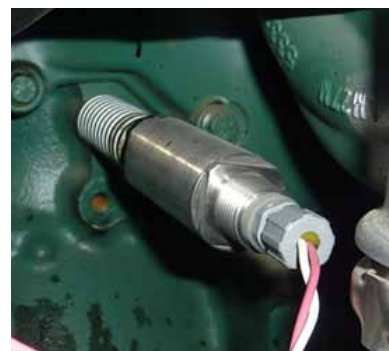
Being one of the largest oil and gas companies in Kazakhstan, CNPC-International Aktobe Petroleum feels an obligation to invest in programs that preserve the environment.

Ongoing gas utilization programs are an example. Rather than flaring the associated gas, CNPC has built multiple gas-plants.

For several decades, gas has been transported to Aktobe City and distributed to households for cooking.

Part of Aktobe city is a small village called "Munai She" which means "Oil Man" in Kazakh. Chinese employees of CNPC-International live in this village. To cope with power outages, the village has its own emergency power station including an emergency genset driven by a Volvo Penta engine, packaged by Genpower.

Because the cost of natural gas is significantly less than diesel fuel, CNPC decided to install an Altronic GTI Bi-Fuel® kit, which allows the engine



to run on normal 100% diesel if gas is unavailable. When switched 'on' the GTI kit substitutes up to 70% of the diesel depending on the methane number (knock index) of the natural gas. Even a low substitution rate results in significant savings. And, as a bonus, it saves the environment because natural gas emissions are significantly cleaner than diesel fuel emissions.

Pictured are the gas-mixer installed just after the air filter, the vibration sensor installed in the engine block, the temperature sensor installed in the exhaust and the manifold air temperature and pressure sensor installed in the air inlet manifold.

The sensors are connected to the control module. The control module monitors all sensor readings and gives an alarm if they exceed alarm thresholds. In that case the unit will automatically switch back to 100% diesel operation.

CNPC is very happy with the result. Not only because of the rapid payback time of this investment, but also because it illustrates that they are serious about caring for the environment.



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #138

# Zenergy

### LOCATION:

Mandaree, North Dakota

### ENGINE/GENERATOR:

CAT QX230 C9 diesel engine-driven generator

### SERVICE:

Prime Power

### GAS SUBSTITUTION:

60% (AVG)

### GTI BI-FUEL® KIT:

Series DN-50

### DISTRIBUTOR/DEALER:

ECO - Alternative Fuel Systems

In North Dakota, the demand for electricity to operate new oil well drilling sites is overwhelming. The number of new wells averages 160 per month and in most cases the wait for electric service is 8 to 12 months. ECO/AFS has outfitted several rental generators with Bi-Fuel® systems. These generators are operating on 60% well gas and 40% diesel.

Jim Fehlauser, Field Superintendent for Zenergy, had this to say about the GTI Bi-Fuel® system, "Thanks to Industrial Equipment Sales and Service and ECO/AFS for providing Zenergy with quality equipment and



(Left to right)  
Jeff Anderson (ECO Alternative Fuels Systems)  
Jim Fehlauser (Zenergy)  
Sam Osborne (Arrow Pipeline LLC)

quality service. This combination has allowed Zenergy to get our wells on line and producing while we wait for electricity. We had seven GTI Bi-Fuel® generators running 24/7 for 8 months with zero down time...which really helps our bottom line."

Zenergy noted the following:

- 60% savings on diesel costs
- Environmentally friendly—lower emissions (NOx, SO, Opacity, NMHC) very important considering current and future environmental regulations.
- No typical black smoke.
- Zero downtime after 6000 hours
- Bi-Fuel® system runs smooth and clean—better than straight diesel.



Fehlauser concluded, "Though we have not needed it, we appreciate the flexibility of using both fuels. If well gas is interrupted the engine switches to straight diesel without a hitch. This helps us to avoid costly down time."

"I highly recommend the GTI Bi-Fuel® system. Zenergy is currently running twelve units, and I will not use anything else."

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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #139

# China National Petroleum Corporation (CNPC)

### LOCATION:

Xinjiang, China

### ENGINE/GENERATOR:

Cat 3512B

### SERVICE:

Drilling rig

### GTI BI-FUEL® KIT:

GTI III-C26

### SUBSTITUTION RATE:

60%

### DISTRIBUTOR/DEALER:

CDSS

China Diesel Support  
Services Ltd

### INSTALLATION DATE:

June , 2010



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #140

# Shin Kong Building A12

### LOCATION:

Le Meridien Hotel  
Taipei, Taiwan

### ENGINE/GENERATOR:

Mitsubishi S16R-Y1PTAA2-1  
KOHLER 2000REOZM

### SERVICE:

Emergency standby generator

### RATED POWER:

2000 kW

### SPEED AND FREQUENCY:

1800RPM/60Hz

### GTI BI-FUEL® KIT:

Series IV-D47

### SUBSTITUTION RATE:

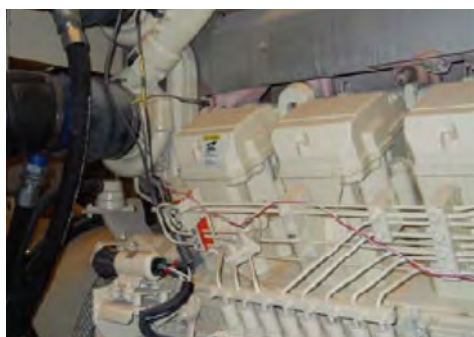
60%

### DISTRIBUTOR/DEALER:

AM-POWER Machine  
International Enterprise Co., Ltd.  
Taiwan

### INSTALLATION DATE:

October, 2010



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 安葆電能  
POWER SOLUTIONS UNLIMITED

  
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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #141

# Gas Company - Energy Center

### LOCATION:

Taipei Gas Corporation  
Taipei, Taiwan

### ENGINE/GENERATOR:

Detroit Diesel 16V92T

### SERVICE:

Emergency standby generator

### RATED POWER:

750 kW

### SPEED AND FREQUENCY:

1800RPM/60Hz

### GTI BI-FUEL® KIT:

Series III-C26

### SUBSTITUTION RATE:

50%

### DISTRIBUTOR/DEALER:

AM-POWER Machine  
International Enterprise Co., Ltd.  
Taiwan

### INSTALLATION DATE:

January, 2008



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #142

# Peak Shaving/Standby/Demo with Bi-Fuel on Propane

### LOCATION:

Escobedo, Nuevo León,  
México

### ENGINE/GENERATOR:

CAT 3306

### SERVICE:

Peak Shaving/Standby/Demo

### RATED POWER:

250 kW

### SPEED AND FREQUENCY:

1800 RPM

### GTI BI-FUEL® KIT:

5015-1A

### SUBSTITUTION RATE:

35%

### DISTRIBUTOR/DEALER:

PHAR, S.A. de C.V.

### INSTALLATION DATE:

April 22, 2014



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #143

# Drilling, Continuous

### LOCATION:

Pennsylvania

### ENGINE/GENERATOR:

CAT 3512

### SERVICE:

Drilling, Continuous

### RATED POWER:

1000 kW

### SPEED AND FREQUENCY:

1800 RPM

### GTI BI-FUEL® KIT:

GTI+

### SUBSTITUTION RATE:

60%

### DISTRIBUTOR/DEALER:

Pennsylvania Power Corp.

### INSTALLATION DATE:

April, 2013



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #144

# Drilling Rig (Mechanical) with Bi-Fuel on CNG

### LOCATION:

Saskatchewan Province  
Canada

### ENGINE/GENERATOR:

MTU 12V2000

### SERVICE:

Drill Rig Power Generation

### RATED POWER:

1000 HP

### SPEED AND FREQUENCY:

1800 RPM

### GTI BI-FUEL® KIT:

6526-2C

### SUBSTITUTION RATE:

60%

### DISTRIBUTOR/DEALER:

Gas Drive Global

### INSTALLATION DATE:

November, 2011



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #145

# Shopping Mall

### LOCATION:

Maceio, Brazil

### ENGINE/GENERATOR:

Scania DC12-53A

### SERVICE:

Shopping Mall Peak Shaving  
Generation

### RATED POWER:

440 Kw

### SPEED AND FREQUENCY:

1800 RPM/60 Hz

### GTI BI-FUEL® KIT:

6514-1A

### SUBSTITUTION RATE:

70%

### DISTRIBUTOR/DEALER:

Analise & Tecnica

### INSTALLATION DATE:

July, 2012



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #146

# Drilling Rig, Continuous

**LOCATION:**

Pinedale, Wyoming

**ENGINE/GENERATOR:**

CAT 3512 C

**SERVICE:**

Drilling Rig, Continuous

**RATED POWER:**

1200 kW

**GTI BI-FUEL® KIT:**

GTI+

**SUBSTITUTION RATE:**

58%

**AVERAGE SAVINGS:**

1200 Gals. Diesel per Day

**GAS TYPE:**

Wellhead

**DISTRIBUTOR/DEALER:**

ECO - Alternative Fuel Systems

**INSTALLATION DATE:**

February, 2014



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #147

# Generator System

### LOCATION:

Macy's Department Store  
West 34th Street  
New York, New York

### ENGINE/GENERATOR:

MTU 12V 1600 G80S

### SERVICE:

Standby Power Service

### RATED POWER:

896 HP

### SPEED and FREQUENCY:

1800 RPM

### GTI BI-FUEL® KIT:

6528-2C

### SUBSTITUTION RATE:

TBD

### DISTRIBUTOR/DEALER:

AMPS  
Advanced Manufacturing &  
Power Systems, Inc.

### INSTALLATION DATE:

March, 2014  
(unit not commissioned)



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #148

# Critical Data Center

### LOCATION:

West Chester, PA

### ENGINE/GENERATOR:

Cummins QSK60G6

### SERVICE:

Emergency Standby

### RATED POWER:

1750Kw x 4

### SPEED and FREQUENCY:

1800RPM - 60Hz

### GTI BI-FUEL® KIT:

DN80 Series

### SUBSTITUTION RATE:

55%

### DISTRIBUTOR/DEALER:

Pennsylvania Power Corporation

### INSTALLATION DATE:

January 23, 2015



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #149

# Critical Data Center

### LOCATION:

West Chester, PA

### ENGINE/GENERATOR:

Cummins QSK60G6

### SERVICE:

Emergency Standby

### RATED POWER:

1750Kw x 2

2000Kw x 2

### SPEED and FREQUENCY:

1800RPM - 60Hz

### GTI BI-FUEL® KIT:

DN80 Series

### SUBSTITUTION RATE:

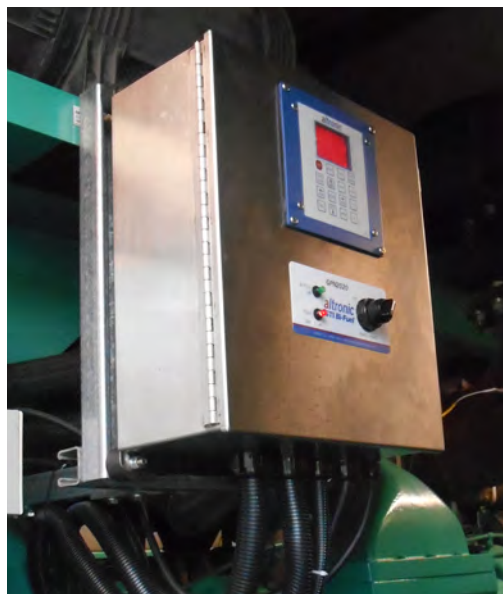
55%

### DISTRIBUTOR/DEALER:

Pennsylvania Power Corporation

### INSTALLATION DATE:

July, 2015



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## Water Treatment Facility (Propane) – US Army Base

**LOCATION:**

Fort Irwin, CA

**ENGINE/GENERATOR:**

MTU 16V4000

**SERVICE:**

Standby

**RATED POWER:**

2.25 MW

**SPEED and FREQUENCY:**

1800RPM / 60Hz

**GTI BI-FUEL® KIT:**

80 Series

**SUBSTITUTION RATE:**

40% – Propane

**DISTRIBUTOR/DEALER:**

Diesel2Gas / Bay City Electric

**INSTALLATION DATE:**

Commissioned August, 2015



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #151

# Southern California Rock Crusher with CNG

### LOCATION:

Southern California

### ENGINE/GENERATOR:

Parallel Perkins 2206  
400kW each

### SERVICE:

Mobile Prime Power

### RATED POWER:

800kW total

### SPEED and FREQUENCY:

1800RPM / 60Hz

### GTI BI-FUEL® KIT:

DN65 with GPN2015 panel  
CARB Compliant  
Nett Technologies, Inc. DOC

### DISTRIBUTOR/DEALER:

Diesel 2 Gas Solutions  
Generator Services

### INSTALLATION DATE:

July, 2013



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## GTI BI-FUEL® SYSTEM PROJECT OVERVIEW #152

# Utility Power Plant – Peak Shaving (Paralleled)

### LOCATION:

Waverly, Iowa

### ENGINE/GENERATOR:

3516B Caterpillar (4)

### SERVICE:

Peak Shaving

### RATED POWER:

2MW

### SPEED and FREQUENCY:

1800RPM

### GTI BI-FUEL® KIT:

DN80

### SUBSTITUTION RATE:

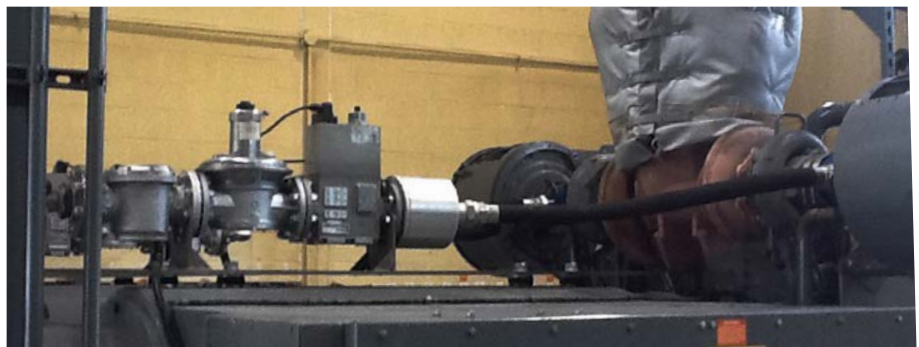
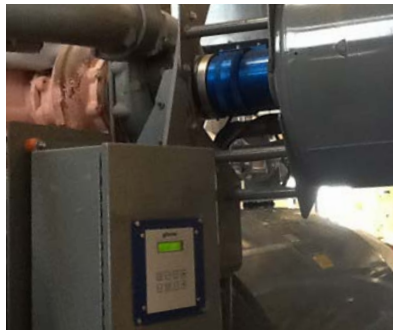
58%

### DISTRIBUTOR/DEALER:

ECO/AFS

### INSTALLATION DATE:

October, 2014



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## OMV Tunisia – Plant Generators

**LOCATION:**

OMV Tunisia-Anaguid FIELD

**ENGINE/GENERATOR:**

C18

**SERVICE:**

Plant Generators

**RATED POWER:**

715kW

**SPEED and FREQUENCY:**

1450RPM@50Hz

**GTI BI-FUEL® KIT:**

Series 50

**SUBSTITUTION RATE:**

55% Gas, 45% Gasoil

**DISTRIBUTOR/DEALER:**

Smartech Solutions

**INSTALLATION DATE:**

01/05/2018



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