

NATURAL GAS VEHICLES

PURCHASING GUIDE



2003



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 President

Welcome to the NGVC's *2003 Natural Gas Vehicle Purchasing Guide*.

Whether you're interested in purchasing an NGV for yourself or your organization's fleet, we encourage you to use this convenient reference to investigate the variety of vehicles available today to meet your transportation needs.

More than 130,000 NGVs operate in the U.S. every day (worldwide, more than 1.2 million NGVs are in service!). This number grows daily as people like you realize the many advantages of NGVs over vehicles that run solely on gasoline or diesel fuel:

- NGVs alleviate our dependence on imported oil. Given today's volatile world political scene, this is an increasingly important energy security consideration. Natural gas is an abundant domestic resource; over 85 percent of natural gas used in the U.S. is produced here and nearly all the rest comes from Canada.
- NGVs are clean burning, which is a critical decision factor as national, state and local governments implement emissions regulations and voluntary measures to improve the quality of the air we breathe. That's why NGVs are the preferred choice of fleet operators and others concerned about our environment. For example, one out of every four new transit buses on order is specified as a dedicated NGV.
- NGVs are less expensive to operate. On a Btu-equivalent basis, NGV fuel costs less than gasoline, diesel and all of the other alternative fuels available. And, because natural gas burns so cleanly, oil change intervals are extended and there's less wear on the engine, which translates into lower maintenance costs.

This year's Guide presents a comprehensive list of natural gas dedicated, bi-fuel, dual-fuel and hybrid vehicles available from the world's leading manufacturers. In the pages that follow, you'll find a selection of sedans, pick-ups, SUVs and vans, a wide variety of medium- and heavy-duty truck cab-chassis offerings, and more than 40 different transit, shuttle and school buses. In addition, we've included information from some of the leading suppliers of refuse and other vocational and niche application vehicles. Last, but certainly not least, we've provided information about the clean-burning natural gas engines that power these vehicles. And, to make your investigation of NGVs even easier, we've listed manufacturer contact names, telephone numbers, web sites and e-mails on our back cover.

We hope you find this Guide useful. If you have additional questions about NGVs, please visit our website at www.ngvc.org or contact Stephe Yborra, Director of Market Development at syborra@ngvc.org. Thank you.

Sincerely,

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LIGHT DUTY

Honda Civic GX

American Honda Motor Co. Inc.

Four-door dedicated CNG sedan; 1.7L four cylinder; up to 8 gge fuel capacity for a driving range near 200 miles.

Certification: SULEV



Crown Victoria

Ford Motor Company

Dedicated sedan/heavy-duty commercial/police interceptor; available in extended length; 4.6-liter SEFI V8 engine, 175 hp, 235 lb.-ft. torque; 12.8-gge fuel capacity, with option for 16.9 gge, providing range of 240-340 miles; antilock braking now standard.

Certification: ULEV



4.3L Light Duty Truck

Baytech Corp.

Modified-certified 4.3L dual-fuel or dedicated CNG S-10/Sonoma, Jimmy/Blazer.

Certification: EPA and CARB ULEV and ILEV, dedicated CNG; EPA ULEV, CARB ULEV, LEV dual-fuel

Econoline E-250 Dedicated Van

Ford Motor Company

5.4-liter V8 engine with 225 hp, 325 lb.-ft. torque; 16.2-gge fuel capacity standard for range of 220 miles.

Certification: SULEV



5.7L Light Duty Van

Baytech Corp.

Modified-certified 5.7L dual-fuel or dedicated CNG light duty vehicle, including G1500/2500/3500 Express & Chevy Van.

Certification: EPA and CARB ULEV and ILEV dedicated, CNG, EPA LEV dual-fuel (CA vehicles must be dedicated CNG)



Econoline E-350 Super-Duty Van/Wagon

Ford Motor Company

Available in extended van, wagon; 5.4-liter V8 engine, 225 hp, 325 lb.-ft. torque; 16.2-gge fuel capacity standard for range of 220 miles; optional tanks provide fuel capacity of 18.6 or 27.2 gge for range of up to 420 miles; payload up to 4,045 lbs.; GVRW from 8,700 to 9,400 lbs.

Certification: SULEV



6.0L Light Duty Truck/Van

Baytech Corp.

Modified-certified 6.0L dual-fuel or dedicated CNG light duty vehicle, including Sierra, Silverado, Suburban, Yukon XL, G1500/2500/3500 Express & Chevy Van.

Certification: EPA and CARB ULEV and ILEV dedicated, CNG, EPA LEV dual-fuel. (CA vehicles must be dedicated CNG)



F-150 Dedicated CNG Pickup

Ford Motor Company

Dedicated 5.4-liter V8 dedicated CNG engine, 230 hp, 325 lb.-ft. torque. Fuel capacity of 21.7 gge with a range of 200-300 miles. Standard dual in bed plus underbody midship tank configuration.

Certification: SULEV



Dodge Ram 1500 Cargo Van

DaimlerChrysler

Dedicated CNG; 5.2-liter Magnum V8 engine; 200- to 300-mile range; 16.3- to 18.7-gge fuel capacity at 3,600 psi.

Certification: ULEV/SULEV



F150 Bifuel Pickup

Ford Motor Company

Available in regular or super cab, 4x2 or 4x4; 139-inch wheelbase. 5.4-liter V8 bifuel (CNG/gas) engine offering 230/260 hp with 325/350 lb.-ft. torque. Fuel capacity of 12.5 gge CNG, 25 gallons gasoline; payload up to 2,720 lbs.

Certification: ULEV



Dodge Ram 2500/3500 Maxi Cargo Van

DaimlerChrysler

Dedicated CNG; 5.2-liter Magnum V8 engine; 200- to 300-mile range; 16.3- to 18.7-gge fuel capacity at 3,600 psi. Certification: ULEV/SULEV

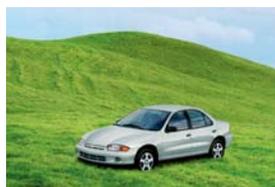


Chevrolet Cavalier Sedan

General Motors Corp.

Bifuel CNG sedan; four-door; 2.2-liter engine; four-speed automatic transmission; estimated 6.2-gge CNG capacity at 3,600 psi, with 14.3-gallon gasoline tank for total driving range of up to 411 miles.

Certification: LEV



Chevrolet Express 2500/3500 Bifuel Van

General Motors Corp.

Available as passenger or cargo van; Vortec 6.0-liter engine; 135- and 155-inch wheelbases; 8,600-9,500 lb. GVW; fuel capacity of 11.2 gge CNG, 31 gallons gasoline.

Certification: ULEV



GMC Savana Bifuel Cargo/Passenger Van

General Motors Corp.

Standard (135 inch) or extended (155 inch) wheelbase with 8, 12 and 15-passenger capacities; Vortec 6.0L V8 engine; fuel capacity for 11.2 gge CNG,

31 gallons gasoline. Certification: ULEV

Chevrolet Express 2500/3500 Dedicated Van

General Motors Corp.

Available as passenger or cargo van; Vortec 6.0-liter engine; 135- and 155-inch wheelbases; 8,600-9,500 lb. GVW; 20.3-gge fuel capacity for a driving range of 220-280 miles.

Certification: SULEV



GMC Savana Dedicated Cargo/Passenger Van

General Motors Corp.

Standard (135 inch) or extended (155 inch) wheelbase with 8-, 12- and 15-passenger capacities; Vortec 6.0L V8 engine; 20.3-gge fuel capacity for a range of 220 to 280 miles.

Certification: SULEV/ULEV



Chevrolet Silverado Bifuel Pickup Truck

General Motors Corp.

Comes in 2WD with regular or extended cab long box and 4WD with regular cab, extended cab or crew cab long box; 6.0L V8 LQ4 engine; fueling capacity of 20 gge CNG, 34 gallons gasoline.

Certification: LEV



GMC Sierra Bifuel Pickup Truck

General Motors Corp.

Comes in 2WD with regular or extended cab long box and 4WD with regular cab, extended cab or crew cab long box; 6.0L V8 LQ4 engine; fueling capacity of 20 gge CNG, 34 gallons gasoline.

Certification: LEV



“My natural gas Civics spend less time in the shop, which means more time out on the street.”

Washington, D.C., is the center of national — and often, worldwide — attention. For Ron Flowers, the District’s Department of Public Works fleet management administrator, the heightened focus on D.C. presents an opportunity to set an example for national and international leaders while bettering air quality for the city’s residents.

That’s why he has integrated more than 180 alternatively fueled vehicles, including 125 NGVs, into his fleet since 1999. In the District’s Parking Enforcement Division, for example, Flowers has placed 58 dedicated natural gas Honda Civic GXs into service. “I’m extremely pleased with our Honda Civics,” says Flowers. “More important, my users are very pleased with their cars.”

With direct responsibility for more than 2,700 vehicles in 42 different city agencies, Flowers appreciates the reliability and cost savings his Civic GXs deliver. “They’re very reliable in this application,” he says. Since switching, I’ve seen a very real reduction in downtime. My natural gas Civics spend less time in the shop, which means more time out on the street. Maintenance costs have been reduced.”



The fleet of Honda Civic GXs also is helping reduce the Washington metro area’s air quality problems, a fact about which the environmentally proactive Flowers is proud. “We made a conscious decision to be part of the solution... not part of the problem,” he says.

Flowers also appreciates the support he’s received from Honda. “They have been very responsive. It’s a good working relationship. We are expecting to add another 40 Civic GXs in 2003.”

For more information on putting Honda Civic GXs into action in your fleet, contact Stephen Ellis, American Honda Motors, at 310-783-3987.



MEDIUM/HEAVY DUTY

Condor

Freightliner Trucks

COE low-cab forward cab/chassis for Class 7/8 applications including refuse, airport refueler, other vocational applications; left-, right- and dual-side steering options; available with Cummins Westport 5.9L B Gas Plus, 8.3L C Gas Plus and Caterpillar/Clean Air Partners 3126, C10 and C12 engines.



Expediter

Autocar

Refuse cab and chassis; 4x2 single-axle or 6x4 tandem-axle; powered by CNG with Cummins Westport 8.3L C Gas Plus or Caterpillar/Clean Air Partners C10 engines.

No Photo Available

4.3L Package Delivery Car (P Chassis)

Baytech Corp.

Modified-certified 4.3L dedicated CNG vehicles 8500 to 14,000 lbs. and for vehicles over 14,000 lbs. GVWR. Used in P chassis Walk-in Vans (Workhorse). Certification: EPA certified ULEV, ILEV, LEV; CARB



5.7L Medium and Heavy Duty Cab-Over

Baytech Corp.

Modified-certified 5.7L dual-fuel or dedicated CNG medium/heavy duty vehicle, including Isuzu NPR HD, GM W4500, and P Chassis (Workhorse).

Certification: EPA ULEV, ILEV, LEV and CARB Low NO_x



5.7L Medium Duty Van Cut-A-Way

Baytech Corp.

Modified-certified 5.7L dual-fuel or dedicated CNG Van Cut-a-Way Shuttle bus.



Certification: EPA ULEV, ILEV, LEV

and CARB Low NO_x

6.0L Medium Duty Specialty Vehicle

Baytech Corp.

Modified-certified 6.0L dual-fuel or dedicated CNG heavy duty specialty vehicle, including C2500HD, C3500HD, Utility Body, Isuzu NPR Flatbed, Van cut-a-way Flatbed and Workhorse Walk-in van.

Certification: EPA and CARB ULEV and ILEV dedicated CNG, EPA LEV dual-fuel (CA vehicles must be dedicated CNG)



“Purchasing Ford Natural Gas Vehicles is a win-win situation for us.”

Every day Ball Aerospace delivers a product line that ranges from the manufacture of canning jars to development of aerospace applications for the U.S. military from its headquarters in Boulder, Colorado.

Many departments work hard to coordinate this diverse product line, including fleet operations, an area of the company that is subject to compliance with certain clean vehicle purchasing requirements, a stipulation made easier thanks to Ford natural gas vehicles.

“It is not too often that we are mandated to do something that we can so easily embrace and benefit from, like operating cleaner fuel vehicles,” says Russ Romaine, fleet manager. “We have not just purchased the minimum requirement, but rather have embraced this program and will be replacing as many vehicles in our fleet with new AFVs as possible.”

Ball’s fleet consists of Ford F-150 pick-ups, which are available in dedicated natural gas or bifuel configurations. These durable utility trucks come in regular or super cab size, 4 x 2 or 4 x 4, and have a 7,700-lb. payload capacity.



Best of all they are reliable and less expensive to operate. “These vehicles are great and we don’t notice any difference in performance between gasoline and AFV models,” adds Romaine. “We also have less vehicle service with our AFVs and have noticed an overall savings of 30% having them in our fleet.”

As Ball Aerospace continues to grow its operations, the fleet size will increase as well and one can expect Ford natural gas vehicles to play a big part in that growth.

For more information on natural gas vehicles from Ford Motor Company, contact 800-34-FLEET (prompt5) or visit our web site at www.afv.ford.com.





LCF Truck
Crane Carrier Co.

Truck powered by CNG or LNG Cummins Westport C Gas Plus 275 hp or Deere 8.1-liter 280 hp engines. Low cab forward, tilt cab designed for refuse collection. Single or tandem rear drive axles.

LWT Truck
Crane Carrier Co.

Truck powered by CNG or LNG Cummins Westport C Gas Plus 275 hp or Deere 8.1-liter 280 hp engines. Low entry (both sides) tilt cab designed for refuse collection; single or tandem rear drive axles.



LET Truck
Crane Carrier Co.

Truck powered by CNG or LNG Cummins Westport C Gas Plus 275 hp or Deere 8.1-liter 280 hp engines. Low entry (both sides) tilt cab designed for refuse collection, heavy-duty; single or tandem rear drive axles.



LET2 Truck
Crane Carrier Co.

Truck powered by CNG or LNG Cummins Westport C Gas Plus 275 hp or Deere 8.1-liter 280 hp engines. Low entry (both sides) tilt cab designed for refuse collection, heavy-duty; single or tandem rear drive axles.



E-Series Dedicated Cutaway Van

Ford Motor Company

E-450 super-duty for shuttle, small school bus and small truck applications; comes with 5.4-liter V8 engine offering 225 hp, 325 lb.-ft. of torque; fuel capacity of 18.5 gge standard, 35.9 gge optional. 158 and 176 wheelbase. Optional tank packages available (3, 4 & 5 tanks).

Certification: ULEV



MB-55 Shuttle/Trolley Chassis

Freightliner Custom Chassis Corp.

Shuttle/trolley chassis with GVWR from 21,000-30,000 lbs. Cummins Westport B Gas Plus 5.9L CNG engine. Optional 4 and 5-tank configuration available. Fuel system provides 300+ miles of range.



“The bottom line is that NGVs improve our company’s bottom line.”

KeySpan Energy’s New York-Long Island operations cover an area from Staten Island to Montauk Point and from the Rockaway Peninsula to the edge of Queens. KeySpan puts a lot of crews in the field to service its more than 2.8 million gas and electric customers and to maintain its power generation and transmission and gas distribution assets.

The company’s fleet of more than 3,800 light-, medium- and heavy-duty vehicles includes about 1,100 NGVs, of which 550 are dedicated CNG Dodge Ram cargo vans. “Our Dodge service vans depart from 15 different yards throughout our service territory every day in all sorts of weather,” says Bob Frenna, KeySpan’s New York director of fleet operations.

“They’re real workhorses. There is no difference in performance between the CNG vans and gasoline vans.” His CNG vans are fitted with additional fuel storage capacity. “We average 10,000 to 15,000 miles a year on each vehicle,” says Frenna, “plus these vans run all day long while crews are working, so fuel economy is important. We definitely see the savings in fuel costs.” According to Frenna, maintenance costs on his Dodge CNG vans are comparable to those of gasoline units.



Of DaimlerChrysler’s fleet sales and service support, Frenna remarks, “Their fleet operations team has really stood behind us in serving KeySpan’s needs.” While KeySpan is required under EPACT to allocate 90 percent of new fleet purchases to alternative fuel vehicles, the company has made a corporate commitment to NGVs because, says Frenna, “the bottom line is that NGVs improve our company’s bottom line.”

Find out how DaimlerChrysler’s Dodge Ram Vans can improve your fleet operation’s bottom line by calling Jim Snider at 248-576-4652.

DAIMLERCHRYSLER



**C112/C120 Day Cab Tractor
Freightliner Trucks**

Day cab tractor with Caterpillar/Clean Air Partners dual-fuel engine capable of running on CNG or LNG and diesel fuel; for short-haul regional distribution applications.
Certification: LEV

**Chevrolet Express Dedicated
Cutaway Van**

General Motors Corp.
12,300-lb. GVW cutaway with Vortec 6.0L V8 engine; 159- or 177-inch wheelbase; 29.7-gge CNG capacity for a driving range of 320 to 410 miles.
Certification: ULEV

No Photo Available

M2 Business Class

Freightliner Trucks

M2 Business Class medium-duty truck chassis powered by LNG or CNG; engines include Caterpillar/Clean Air Partners 3126 and C12, Cummins Westport 8.3L C Gas Plus and 5.9L B Gas Plus.
Certification: LEV/ULEV



No Photo Available

**GMC Savana Bifuel
Cutaway Van**

General Motors Corp.
12,000-lb. GVW cutaway with Vortec 6.0L V8 engine; 159- or 177-inch wheelbase; 20.6-gge CNG capacity with 35-gallon gasoline tank.
Certification: ULEV

No Photo Available

**Chevrolet Express Bifuel
Cutaway Van**

General Motors Corp.
12,000-lb. GVW cutaway with Vortec 6.0L V8 engine; 159- or 177-inch wheelbase; 20.6-gge CNG capacity with 35-gallon gasoline tank.
Certification: ULEV

**GMC Savana Dedicated
Cutaway Van**

General Motors Corp.
12,300-lb. GVW cutaway with Vortec 6.0L V8 engine; 159- or 177-inch wheelbase; 29.7-gge CNG capacity for a driving range of 320 to 410 miles.
Certification: ULEV

No Photo Available

***“Based on our success so far,
I hope we convert more
of the fleet.”***

Bars, restaurants and other businesses throughout the New York metro area rely on Manhattan Beer to deliver their favorite brews. Manhattan Beer relies on clean burning NGVs to get the job done. Recently, 15 of the 90 delivery trucks operating out of the company’s Bronx facility were re-powered with John Deere 6.8-liter dedicated natural gas engines, and an on-site fueling facility was installed.

State and federal grants supplemented the company’s investment. “It’s working out great,” says Gerry Maharaj, Manhattan’s corporate director of fleets. “Summer is our busiest time of year and our CNG trucks have been completely reliable – we haven’t had a single hour of downtime.”

Bell Power Systems, Deere’s authorized eastern U.S. distributor of natural gas engines, performed the engine change-outs and CNG tank installations. “Bell has been there for us from the start and has made the transition a smooth one,” adds Maharaj. The drivers like the new trucks, too. “All of our drivers like to drive the CNG units because they’re much quieter and a lot cleaner,” he says.



The 15 trucks will displace more than 540,000 gallons of diesel fuel and prevent over 177 tons of emissions in the next 12 years. “I’m proud of what we’re doing here,” says Maharaj of the company’s commitment to reducing neighborhood pollution. “It’s the right thing to do. Based on our success so far, I hope we convert more of the fleet.”

For more information on re-powering your vehicles with John Deere natural gas engines, contact Alex Bell, Bell Power Systems, at 800-225-8669.





T300

Kenworth Trucks

Medium-duty (Class 6/7) tractor or cab and chassis with single- or tandem-axle configuration; powered by Caterpillar/Clean Air Partners 3126 LNG engine or Cummins Westport 5.9L B Gas Plus or 8.3L C Gas Plus LNG engines.

T600/T800

Kenworth Trucks

Heavy-duty (Class 8) conventional tractor or cab and chassis with single- or tandem-axle configuration; powered by Caterpillar/Clean Air Partners C10 and C12 LNG engine.



LE

Mack Trucks Inc.

Refuse truck, CNG or LNG, with Mack Eco-Tech E7G 325 engine, 325 hp at 1,950 rpm; low COE dual steer refuse chassis for front, side- and rear-load refuse bodies.

Certification: LEV



MR

Mack Trucks Inc.

Truck with Mack Eco-Tech E7G CNG or LNG engine, 325 hp at 1,950 rpm; for refuse, concrete pumping, fuel oil delivery and block truck applications.

Certification: LEV



320 LCF

Peterbilt Motors Co.

Low-cab-forward refuse chassis with left-, right- and dual-side steering options; Cummins Westport dedicated 8.3L C Gas Plus or Caterpillar/Clean Air Partners dual-fuel 3126 or C-10 engines (LNG).

Certification: Exceeds CARB's optional NO_x levels



330

Peterbilt Motors Co.

Conventional cab and chassis or tractor configuration with single- or tandem-axle for variety of medium-duty applications (Class 6/7). Caterpillar/Clean Air Partners C-3126 dual-fuel (LNG) engine.



“We haven’t purchased a single gasoline or diesel unit since 1993.”

When you catch a ride on Sun Metro, El Paso’s city transit system, chances are good you will be traveling in a vehicle operating on clean natural gas. In fact, more than 200 of the mass transit agency’s fleet of 275 buses, paratransit shuttles, trolleys and support vehicles are dedicated LNG or CNG units.

Sun Metro’s experience dates back to early 1993 when the agency took delivery of its first two CNG buses. Then, later that year, they placed 20 LNG paratransit units into service. “We haven’t purchased a single gasoline or diesel unit since 1993,” says Wes Swenson, Sun Metro’s coach maintenance chief. “In fact, we plan on replacing the 79 remaining diesel buses with more NGVs.” The vehicles refuel at the main depot’s central L/CNG station, which is supplied by Applied LNG Technologies (ALT).

The station comprises three cryogenically insulated 20,000-gallon LNG tanks equipped with both LNG and CNG dispensers. CNG flash-evaporated from LNG creates the pressure needed to move the low-pressure LNG from the storage tanks to the vehicle tanks.



“I like the liquid system,” says Swenson. “The methane content is higher and the quality is real consistent. That’s important for my engines and our emissions requirements. We monitor usage daily and e-mail ALT and they schedule deliveries. They’re very reliable,” says Swenson.

The company plans to take advantage of ALT’s remote monitoring and automatic fuel dispatching capability. Federal grants from the U.S. Department of Transportation’s CMAQ Program funded 80 percent of the fueling station.

For more information about Applied LNG Technologies fueling systems and services, contact Juanita Diaz at 806-355-5679, ext. 283.





357/378/379/385/387

Peterbilt Motors Co.

Conventional cab and chassis or tractor configuration with single- or tandem-axle for variety of heavy-duty applications (Class 8). Available with Caterpillar/Clean Air Partners C-10 or C-12 dual-fuel (LNG) engine. 387 model has integrated sleeper.

CARGO

Sterling Truck Corp.

COE low-cab forward cab/chassis for Class 7/8 applications e.g. refuse, airport refueler/other micro-niche applications; available with dual-side steering options; available with Cummins Westport 5.9L B Gas Plus engine (conversion).



362 COE

Peterbilt Motors Co.

COE Class 8 chassis powered by Caterpillar/Clean Air Partners dual-fuel (LNG) C12, ideal for highway freight and other heavy-duty day trip applications.



CONDOR

Sterling Truck Corp.

COE low-cab forward cab/chassis for Class 7/8 applications e.g. refuse, airport refueler/other micro-niche applications; left-, right- and dual-side steering options; available with Cummins Westport 5.9L B Gas Plus, 8.3L C Gas Plus, DDC Series 50 and 60 Gas, Caterpillar/Clean Air Partners 3126, C10 and C12.



CitiVan

Solectria

Hybrid-electric CitiVan delivery truck with natural gas-powered APU.

L-Line

Sterling Truck Corp.

Day cab tractor or truck with Caterpillar/Clean Air Partners dual-fuel engine capable of running on CNG or LNG and diesel fuel; for short-haul regional distribution applications.



ACTERRA

Sterling Truck Corp.

Medium-duty truck chassis powered by LNG or CNG; engines include Caterpillar/Clean Air Partners 3126, Cummins Westport C (8.3L) and B (5.9L) Series.



4900 SA/FA

Western Star Trucks

Day cab tractor with Caterpillar/Clean Air Partners dual-fuel engine capable of running on CNG or LNG and diesel fuel; for short-haul regional distribution applications.



A-LINE

Sterling Truck Corp.

Day cab tractor with Caterpillar/Clean Air Partners dual-fuel engine capable of running on CNG or LNG and diesel fuel; for short-haul regional distribution applications.



BUSES/SHUTTLES/TROLLEYS

AVS 22

Advanced Vehicle Systems Inc.

Medium-duty hybrid-electric transit/shuttle bus with low floor; designed for applications in which top speed requirement is less than 45 mph and average route speed is less than 18 mph; accommodates up to 22 passengers; equipped with Capstone MicroTurbine configured to run on CNG or LNG.



AVS 30/AVS 35

Advanced Vehicle Systems Inc.

Hybrid-electric, 12-year heavy-duty 30- or 35-ft. transit bus; low floor; capacity of up to 31 seated passengers; designed for average route speeds of less than 20 mph; equipped with Capstone MicroTurbine powered by CNG.



AVS 40

Advanced Vehicle Systems Inc.

Hybrid-electric, 12-yr. heavy-duty 40-ft. transit bus; low-floor; capacity of up to 41 seated passengers; designed for average route speeds of less than 20 mph; equipped with Capstone MicroTurbine powered by CNG.



All American RE

Blue Bird Corp.

School bus available in 189 WB (66 passenger) to 273 WB (84 passenger) configurations; powered by John Deere 6.8L* (225hp) and 8.1L (250hp) CNG engines. *(limited time only)



CSRE Commercial Series Bus

Blue Bird Corp.

Commercial series rear-engine bus, transit or shuttle vehicle; available in lengths from 32 feet to 39 feet. Powered by Cummins Westport 5.9L B Gas CNG engine. Certification: LEV



Micro Bird

Blue Bird Corp.

Student transport shuttle on Ford E450 Super Duty chassis with 5.4L V8 dedicated CNG engine; 3 tanks provide 18gge; seats up to 30 or 5 wheel chairs or 18 plus one wheelchair.

Certification: ULEV, CARB HDE



“Our LNG trucks and fueling station represent our commitment.”

Norcal provides waste collection, recycling and disposal services to over 400,000 residential and 50,000 commercial customers in San Francisco and more than 50 other Northern California communities. In addition to refuse hauling services, the company has implemented a variety of innovative recycling programs such as reclamation of building construction and demolition debris and large-scale composting of food and organic wastes.

Norcal has long demonstrated its ability to meld sound business with environmentally progressive practices. In 2001, the company began converting its 38 long-haul tractors in San Francisco to run on LNG. Each truck completes up to nine trips per day using 15-liter 400-hp natural gas engines. These trucks haul refuse from the transfer station in San Francisco to a landfill in Altamont, a 110-mile roundtrip.

The trucks also haul recyclables to processing and composting facilities. “Our LNG trucks and fueling station represent our commitment,” says Bennie Anselmo, Norcal’s VP of fleet & maintenance. To fuel their vehicles, Norcal called upon ENRG to install an LNG refueling station, the Bay Area’s first.



“We worked as a team with ENRG to plan, design, permit and build the LNG station,” says Anselmo. “It was a six-month process and ENRG delivered our project on time. They even provided a temporary LNG tank during project implementation to fuel our first couple of units during the trial field test.” Under a 10-year lease agreement, Norcal operates the facility and ENRG provides regular preventative maintenance services.

For more information on CNG and LNG fueling options, call Jim Harger, ENRG, at 562-493-2804.



North America's leader in clean transportation



Ultra LF Series

Blue Bird Corp.

Low-floor commercial transit or shuttle bus available in 30'-157 WB and 35'-222 WB; powered by Cummins Westport 5.9L B Gas, 230hp CNG engine.

Xcel 102 Transit/Shuttle Bus

Blue Bird Corp.

27-49 passenger transit or shuttle vehicle, available in under 30', 35' and 40' lengths. Powered by John Deere 8.1L, 250hp CNG engines.

Certification: LEV



Challenger Bus

Champion Bus Inc.

Short transit/paratransit/shuttle bus; CNG-powered with Ford or Chevrolet engine; Ford or Chevrolet cutaway chassis.

Certification: LEV/ULEV

Crusader Bus

Champion Bus Inc.

Short transit/paratransit/shuttle bus; CNG-powered with Ford or Chevrolet engine; Ford or Chevrolet cutaway chassis.

Certification: ULEV



CTS Bus

Champion Bus Inc.

Transit/shuttle/paratransit bus with Cummins Westport 5.9-liter, GM 8.1-liter V8 CNG engine options; available with Freightliner MB45 and MB55 or Workhorse P32 chassis in lengths from 22 to 33 feet.

Certification: ULEV



AH-28 American Heritage Streetcar

Chance Coach Inc.

Trolley powered by Cummins Westport 195-hp CNG engine; roof-mounted fuel tanks with an approximate range of 250 miles.

Certification: ULEV

E-Z Rider II Bus

El Dorado National

Low-floor transit bus. 30- and 35-foot models; available with CNG or LNG engine. 31,280-lb. GVWR.



“CAP is responsive and they’ve made the switch to LNG easier than expected.”

SYSCO Corporation, North America’s largest foodservice distributor, serves thousands of businesses throughout Los Angeles and Orange counties from its Walnut, California subsidiary.

As part of a broader SYSCO corporate effort to move to cleaner fleets, 35 of the 220 rigs at this site have been converted to run on LNG. According to Bob Kidder, fleet maintenance manager, another 30 are due for conversion from diesel to LNG soon. The units feature 12-liter, 410-hp Caterpillar C-12 engines reconfigured by Clean Air Partners (CAP) to run on LNG.

“Eventually we will have the whole fleet on LNG. The air situation here in the South Coast (Air Quality Management District) is particularly bad. Rather than waiting for stricter emissions regulations, we decided to jump out front and do our part,” he explains, adding, “These units are performing fantastic with no loss in power. The electronic controls optimize fuel injection ratios and timing to give us good torque across the entire power band.”

Kidder also notes that clean-burning natural gas extends oil life, allowing techs to “push out oil changes, monitor the impact and, so far, get an extra 10,000 miles.”



About CAP, Kidder is equally complimentary, “I’m impressed. CAP is responsive and they’ve made the switch to LNG easier than expected.”

To learn more about Clean Air Partners’ line of CNG and LNG engines and how they can drive your operations, call Tara Schaeffer at 858-332-4830.





MST II Bus

El Dorado National

Medium- or heavy-duty transit/shuttle bus; chassis built by Freightliner; CNG-powered Cummins Westport B5.9 G engine; low-floor with 26-, 28- and 30-foot configurations; 25,500-lb. GVWR.

Articulated AN 460

Neoplan USA Corp.

Articulated low-floor transit/commuter bus; 60-foot length; CNG, LNG optional.



Transmark RE Bus

El Dorado National

Heavy-duty transit bus; available with CNG or LNG engine; conventional-floor 29- or 2-foot models; 29,800-lb. GVWR; 18- to 27-passenger capacity.



Metroliner AN 340/345

Neoplan USA Corp.

Transit/commuter bus with Detroit Diesel Series 60G engine; up to 400 hp; lengths of 40 and 45 feet.



Euroshuttle

Goshen Coach

Shuttle bus on Freightliner MB55 chassis with Cummins Westport 5.9L B Gas Plus engine; 158.5 WB, 25' length; 5 CNG tanks provide 200 mile range.

Transliner AN 435/440

Neoplan USA Corp.

Transit bus with CNG or LNG option using Cummins Westport C Series engine.



GC II

Goshen Coach

Shuttle bus on Ford E450 chassis with 5.4L engine; 176 WB, 25' length; 2-4 CNG tanks provide 28.2gge, 160-200 mile range.



**Transliner AN 435LF/
AN 440 LF**

Neoplan USA Corp.

Low-floor, 35- or 40-foot transit bus with CNG or LNG; Cummins Westport C Series engine.



GC II LF

Goshen Coach

Low-floor shuttle bus with 6.8L engine; 218 WB, 30' length; up to 8 CNG tanks for 40gge, 300 mile range.

30/35/40 HF Transit Coaches

New Flyer of America

High-floor transit coaches in 30-, 35- and 40-foot lengths, powered by CNG or LNG; Detroit Diesel Series 50 or Cummins Westport C Plus engine.



Molly Trolley

Molly Corporation

Nostalgic trolley on Freightliner MB45 or MB55 chassis; powered by Cummins Westport 5.9L B Gas Plus engine; 5 CNG tanks provide up to 300 mile range.



30/35/40 LF Transit Coaches

New Flyer of America

Low-floor transit coaches in 30-, 35- and 40-foot lengths, powered by CNG or LNG; Detroit Diesel Series 50 or Cummins Westport C Plus engine.



Metrotrans Classic Series

Model 24

Nations Bus Corp.

Transit shuttle available in 24- and 28-foot lengths. CNG-powered by 6.8L Triton V-10 engine.



40-LFW Bus
North American Bus Industries (NABI)
 Low-floor transit bus powered by CNG or LNG in 40-foot length; Cummins Westport or Detroit Diesel engine.

40C-LFW/45C-LFW Compobus

North American Bus Industries (NABI)

Low-floor transit powered by CNG or LNG in lengths of 40 and 45 feet.



Model 416 Bus
North American Bus Industries (NABI)
 Transit bus with Detroit Diesel or Cummins Westport CNG/LNG engine; 40-foot length.

Model 436 Bus
North American Bus Industries (NABI)

Standard-floor, 59.5-foot transit bus with Detroit Diesel, Cummins Westport NG engine.



Orion II Bus
Orion Bus Industries
 CNG-powered transit/shuttle bus; low-floor with Cummins Westport B5.9G engine; comes in lengths of 22 and 26 feet; 24,000-lb. GVWR.

Orion V Bus
Orion Bus Industries
 CNG-powered transit bus; DDC series 50G, Cummins Westport ISL engines; comes in lengths of 30, 35 and 40 feet; 40,600 lb. GVWR; eight roof-mounted CNG cylinders.



Orion VII Bus
Orion Bus Industries
 CNG-powered transit bus; low-floor with DDC Series 50G, Cummins Westport C8.3G engine; comes in lengths of 30, 35 and 40 feet.

Classic FE
Specialty Vehicles Inc.
 Front-engine trolley on Freightliner Custom Chassis with Cummins Westport B5.9L CNG engine; underfloor tanks. Certification: ULEV



“NexGen really came through in meeting our tight construction timeline.”

In 1998, in an effort to help improve air quality in the region, the Phoenix Public Transit Department began switching operation of its bus fleet from diesel to clean liquefied natural gas (LNG). By summer 2001, nearly 200 of the 235 buses running out of their South Station depot operated on LNG and 96 more were already on order as older diesel units were taken out of service and new routes were added.

“Our capacity to fuel and maintain LNG buses only at the South Station was nearing its limit,” says Kini Knudson, Phoenix’s Transit Facilities Project Manager, “and our plan was to expand LNG operations to our North Station division, so a new station was needed.”

The general contractor selected NexGen Fueling to manufacture and install a new 40,000-gallon facility with four LNG dispensers and additional L/CNG capability to service the transit and other city departments’ light-duty CNG vehicles. “We needed to get our new station up and running as quickly as possible,” says Knudson. “NexGen really came through in meeting our tight construction timeline, accommodating equipment delivery schedules and even suggesting some design ideas to improve station operations and safety.”



They also worked closely with Knudson to meet certification requirements of the city’s code and fire departments, he adds. “They’ve coordinated with us throughout the process,” says Knudson, “from construction through commissioning, and training of our people to working out post-installation operational issues.”

For more information on assessing your NGV fueling needs and designing and installing your station, contact Don Debelak at NexGen Fueling at 952-882-5032.





Classic RE
Specialty Vehicles Inc.
 Rear-engine trolley on Freightliner Custom Chassis with Caterpillar/ Clean Air Partners 3126 CNG engine; underfloor tanks.
 Certification: ULEV

Senator Cutaway Bus
Supreme Corp./Startrans Bus Division
 Ford/Chevrolet chassis; shuttle or paratransit floorplans; up to 25 passengers; 12,000 - 14,050 GVW; 138 - 176 WB; 5.4L or 6.8L natural gas engine.



The AllStar
Starcraft Bus
 Mid-size bus available with Ford or General Motors chassis; 15-29 passengers; 6.8L V10 CNG engine.



Sentinel Van
Supreme Corp./Startrans Bus Division
 Ford high/mid/sport top; shuttle or paratransit floorplans; up to 15 passengers; 138 WB; 9400 GVW; 5.4L or 6.8L natural gas engine.



The StarCruiser
Starcraft Bus
 102 wide mid-size bus with Freightliner F65B chassis; 19-37 passengers; Cummins B5.9G CNG engine.

Saf-T-Liner ER Bus
Thomas Built Buses
 School bus with Cummins Westport or John Deere CNG engine; available in student capacities from 66 to 90.



The StarLite
Starcraft Bus
 Narrow-body bus for 8-14 passengers; low step-in height; Ford chassis; 6.8L V10 CNG engine.



Transit Liner
Thomas Built Buses
 Shuttle/transit bus with CNG engine; available with a capacity of up to 45 passengers.



Ambassador
Supreme Corp./Startrans Bus Division
 Freightliner Custom chassis; shuttle or paratransit floorplans; up to 37 passengers; 19,000 - 25,500 GVW; 190 - 236 WB; Cummins Westport 5.9L B Gas Plus natural gas engine.

EcoMark Hybrid Transit Bus
TransTeq
 EcoMark 116-passenger shuttle bus with natural gas-powered APU; 45-ft., low-floor configuration; stainless tube frame with plastic body; Ford 2.5-liter APU.



President FE/RE
Supreme Corp./Startrans Bus Division
 Freightliner chassis; shuttle or paratransit floorplans; up to 37 passengers; 20,500 - 27,000 GVW; 178- 252 WB; Cummins Westport 5.9L B Gas Plus natural gas engine; front/rear engine configuration.



Hybrid-Electric Trolley
Trolley Enterprises Inc.
 With Freightliner or Spartan chassis; Cummins Westport CNG or LNG engine; 16- to 50-passenger configurations with GVW of 19,000 to 29,000 lbs.

REFUSE/VOCATIONAL



PT 1000

Heil Environmental Industries

High compaction rearloader available in 18, 20 and 25 yds; natural gas power available on Autocar, Freightliner, Mack and Sterling. Natural gas also available on F4000, F5000 and PT Commercial.

DuraPack Half-Pack/Formula West Half-Pack

Heil Environmental Industries

Frontloaders available in dump and full eject with sizes ranging from 23 to 33 yds; lightweight Formula West unit designed for west coast market; both models available in a Classic version. Natural gas power available on Autocar and Mack.



DuraPack Python

Heil Environmental Industries

Frontloader with automated arm available in 26, 28 and 33 yds. Natural gas power available on Autocar and Mack. Natural gas option also available with F7000, Rapid Rail, PowerLift and Starr Automated Products.

MultiPack

Heil Environmental Industries

MultiPack combines versatility of F5000 tailgate with new and powerful Python automated arm; available in a 24 yd. body. Natural gas power available on Autocar and Mack.



Goliath

McClain E-Z Pack

Rearloaders with 20-31 yd capacities, natural gas power available on Mack MR and LE and Autocar Expediter chassis.

Hercules

McClain E-Z Pack

Commercial frontloader with 35-44 yard capacities, natural gas power available on Mack MR and LE and Autocar Expediter chassis.



Atlantic/Pacific Series

McNeilus Truck Mfg.

Frontloaders with 40, 43 and 45 yd capacities; natural gas power available on Freightliner Condor, Autocar Expediter and Mack MR/LE chassis; Pacific series engineered for weight-conscious west coast market.



“The engines provide performance that is similar if not better than diesel units.”

At its El Cajon, California, operation, Waste Management uses Mack refuse trucks running on clean LNG to improve the quality of life for the people the company serves in San Diego and its surrounding communities.

“Waste Management has made a corporate commitment to testing and deploying environmentally friendly technologies,” says Alan Walsh, Waste Management’s San Diego market area general manager. “We’ve embraced that mission completely at the local level,” he adds, noting that 120 of his 145 trucks run on LNG. “It’s the largest natural gas Mack refuse fleet at one location. My plan is to phase out the rest of the diesel units and go with LNG.”

The fleet refuels at an on-site 45,000-gallon LNG station. Walsh notes that Waste Management has enjoyed a long relationship with Mack. “We’ve got front loaders, automatic side-loaders and roll-off units - all of them Mack MR or LE models with a low-NOx engine.” He also gives a thumbs-up to Mack’s engine diagnostics technology.



“We have found Mack to be an excellent partner in supporting our needs, not only in delivering equipment on time but in working side-by-side with ongoing service and maintenance issues.”

Walsh adds that his drivers really like their Mack LNG trucks. “The engines provide performance that is similar if not better than diesel units. They’re cleaner and definitely quieter, which is exactly what we need for residential and apartment applications.”

For more information on putting the clean, quiet power of Mack natural gas trucks to work in your operations, call Steve Ginter at 610-709-3259.



StreetForce Series

McNeilus Truck Mfg.

Complete line from 10-31 yd capacity; includes "MA" manual automated side loader, "A" auto side loader, "AFE" automated full eject side loader and "REL" rear end loader. Natural gas power available on Mack MR/LE, Autocar Expediter and Freightliner Condor chassis.



**Broom Bear Street Sweeper
Elgin Sweeper Co.**

Single-engine sweeper with Cummins Westport C Gas Plus 8.3L CNG engine. Certification: LEV/ULEV

**Standard/Bridgemaster
Mixers**

McNeilus Truck Mfg.

Concrete mixers from 4.5-11.5 legal yard loads; Bridgemaster has additional axle for improved capacity, weight distribution; natural gas power available on Mack MR, Peterbilt, Autocar Expediter, Sterling chassis.



**Crosswind J Dual Street
Sweeper**

Elgin Sweeper Co.

Regeneration air type sweeper propelled by Cummins Westport B5.9G engine with 52 dge CNG storage; sweeper engine is Ford 4.2L CNG engine.



Eagle F Dual Street Sweeper

Elgin Sweeper Co.

Four-wheel mechanical street sweeper propelled by Cummins Westport B5.9G CNG engine; sweeper driven by Ford 2.5L CNG engine. Certification: LEV/ULEV



**Superlight/Standard/
Superduty**

Wittke

Series of frontloaders available in 38, 40, 44-yard capacities (44 available with low-profile option); natural gas power available in Mack, Autocar, Peterbilt, Condor chassis.



MP1200G Locomotive

Motive Power Co./Wabtec

Railroad switching locomotive fueled by LNG. Caterpillar engine; 1,200-hp; three interconnected LNG tanks for a total of 1,400 gallons.



Express

Wittke

Manual side-loader available in low-profile (25, 29 yds) and standard (33, 37yds) profile. Natural gas power available on Autocar, Condor and Mack chassis.



**Olympia Millennium/
Millennium Plus**

Resurface Corp.

Ice resurfer with 305-cu.in. Chevrolet engine converted to natural gas for lower indoor emissions.



Crocodile

Wittke

Automated side-loader available in 24 and 30 yd capacities; natural gas power available on Mack, Autocar and Condor chassis.



BL 2000 Tiger Belt Loader

Tiger Tractor/ATaylor-Dunn Co.

CNG-powered conveyor belt loader.



MISCELLANEOUS

**5.7L Heavy Duty
Streetsweeper**

Baytech Corp.

Modified-certified 5.7 dual-fuel or dedicated CNG TYMCO Street-sweeper, including Isuzu NPR HD, GM W4500. Certification: EPA ULEV, ILEV, LEV and CARB Low NO_x



Lift Truck

Clark Material Handling Co.

Cushion- or pneumatic-tired lift truck with 4,000-6,000-lb. capacity. Engine choices include GM 3.0-liter and Mitsubishi 2.4-liter; aftermarket upfit to CNG upon customer request.



TIG 30-60, 3000-6000

Drawbar Tow Tractor

Tiger Tractor/ATaylor-Dunn Co.

CNG-powered cargo tow tractor with 3000-6000 drawbar capacity; airport, warehouse and other cargo applications.





Model 600 Municipal Street Sweeper

TYMCO Inc.

Heavy-duty air sweeper available with CNG option. Available as a dedicated unit or split unit.

GC Series

Yale Materials Handling Corp.

Gas cushion-tire or pneumatic tire truck available with CNG option; comes in capacities from 3,000 to 15,000 lbs.



GP Series

Yale Materials Handling Corp.

Gas cushion-tire or pneumatic tire truck available with CNG option; comes in capacities from 3,000 to 15,000 lbs.



440 Series/500 Series/520 Series

Zamboni

Ice resurfer, Volkswagen 1.8L or Ford 2.5L CNG engine.



5.7L ULEV Engine

Baytech Corp.

Modified-certified 5.7L dual-fuel or dedicated CNG engine for vehicles under 14,000 lbs. GVWR. Used in van cut-a-way shuttle buses (Champion, Eldorado), full-size vans (GM), cab-over chassis (Isuzu NPR, W3500), walk-in vans/P chassis (Workhorse). Certification: ULEV, ILEV, LEV



5.7L ULEV/Low NO_x Engine

Baytech Corp.

Modified-certified 5.7L dual-fuel or dedicated CNG engine for vehicles over 14,000 lbs. GVWR. Used in cab-over chassis (Isuzu NPR HD, W4500), P chassis (Workhorse).

Certification: EPA certified ULEV, ILEV, LEV; CARB-certified Low NO_x.



3126 Dual-Fuel Engine

Clean Air Partners

Available in 190 and 250 hp configurations. 2200 rpm, 2500/2400 low idle rpm. Offered in CNG and LNG. Available for any heavy-duty or mid-range truck and bus applications. Certification: LEV



C10 Dual-Fuel Engine

Clean Air Partners

Available in 280 and 350 hp configurations. CNG and LNG offered. Fuel use: 85 percent natural gas, 15 percent diesel. Available for any heavy-duty or mid-range truck and bus applications. Certification: LEV



C12 Dual-Fuel Engine

Clean Air Partners

Available in 380 hp configuration. CNG and LNG offered. Fuel use: 85 percent natural gas, 15 percent diesel. Available for any heavy-duty or mid-range truck and bus applications. Certification: LEV



Cummins Westport B Gas Plus

Cummins Westport, Inc.

Lean burn spark-ignited 5.9L engine available up to 230 hp. Replaces B5.9G engine. Used in urban bus and truck fleets.



Cummins Westport C Gas Plus

Cummins Westport, Inc.

Lean burn spark ignition 8.3L engine with coil-on-plug technology and multiple spark discharge. Up to 280 hp at 2400 rpm. Optimum choice for heavy-duty refuse trucks, delivery vehicles, urban buses and large school buses. Certification: LEV/ULEV



ENGINES

AFT 466 C Series

Alternative Fuels Technologies

New on-road heavy-duty 7.6L engine; 250-hp; 646lb-ft of torque @ 1850 rpm; ideal for shuttle bus, school bus, fleet delivery, trash truck and other medium-duty applications.

Certification: EPA/CARB ULEV



AFT 466 E Series

Alternative Fuels Technologies

New on-road heavy-duty 7.6L lean burn engine for shuttle bus, school bus, fleet delivery, trash truck and other medium-duty applications. Available 1st Q. '03. Certification: EPA/CARB ULEV certification pending



4.3L ULEV Engine

Baytech Corp.

Modified-certified 4.3L dedicated CNG engine for vehicles 8500 to 14,000 lbs. and for vehicles over 14,000 lbs. GVWR. Used in P chassis Walk-in Vans (Workhorse).

Certification: EPA certified ULEV, ILEV, LEV; CARB



Cummins Westport ISXG

Cummins Westport, Inc.

15L LNG engine features new Westport-Cycle (high pressure direct injection) compression ignition technology; ratings from 400-500hp with performance comparable to diesel; ideal for heavy-duty tractor trailer highway day-trip applications. Available Spring 2004.

Certification: Certifications pending



460 LSI

Jasper Engines & Transmissions

CARB-certified 460ci spark-ignited natural gas engine. Other remanufactured Ford and GM natural gas engines available from 350ci to 460ci.

Certification: YES



6047MKG8 - Series 50G

Detroit Diesel Corp.

In-line, four-cylinder natural gas (LNG or CNG). Transit bus, generator applications. 275 hp at 2,100 rpm.

Certification: EPA & CARB Certified



8.1L 250hp

John Deere Power Systems

Dedicated medium/heavy-duty engine. 8.1L @ 250 hp, 800 lb.-ft. of torque. Meets CARB optional low NO_x.

Certification: ULEV

6067MKG8 - Series 60G

Detroit Diesel Corp.

In-line, 400 hp, six-cylinder natural gas engine (CNG or LNG). Available for motor coach and generator applications.

Certification: EPA & CARB Certified



8.1L 275hp

John Deere Power Systems

Dedicated heavy-duty engine. 8.1L @ 275 hp, 800 lb.-ft. of torque. Meets CARB optional low NO_x.



8.1L 280hp

John Deere Power Systems

Dedicated medium/heavy-duty engine. 8.1L @ 280 hp, 900 lb.-ft. of torque. Meets CARB optional low NO_x.

“NGVs make good sense... for the city and for the people who live here.”

When officials in the border city of Laredo, Texas, decided to expand their natural gas vehicle operations, they turned to the experts at CenterPoint Energy (formerly Reliant Energy/Entex Fuels) for guidance in developing a new fueling facility.

“Until now, our NGVs have refueled at a site owned and operated by El Metro (Laredo’s transit authority),” says Joe Guerra, Laredo’s Director of Public Works. “El Metro’s fueling station is in need of an upgrade. Besides, we know we’re going to expand the city fleet and want to provide a public access station to serve the state, federal and private fleets based here.”

El Metro has 26 CNG buses and will add 10 more in the near future. The city’s CNG fleet comprises another 45 light duty vehicles including sedans, vans and pickup trucks. “CenterPoint acted as our consultant and partner,” says Guerra. “They worked closely with us to evaluate our current and future fueling needs, then designed and engineered the whole system. They’re real professionals.” The new CNG station is on schedule to open in October 2002 as planned. Once open, El Metro will utilize the city’s new refueling site while CenterPoint modernizes the transit authority’s existing station.



Despite the fact that Laredo’s population exempts it from EPA Clean Air Act attainment mandates, city officials and business leaders have been active participants in a Clean Cities Coalition that is taking progressive steps to maintain good air quality, says Guerra. “NGVs make good sense... for the city and for the people that live here and CenterPoint Energy is a part of that process.”

For more information on CNG and LNG fueling stations that meet your needs, contact Johnny LaBum, CenterPoint Energy, at 713-207-5624.



NOTES

“From Parks & Rec to City Hall, we spread around the natural gas vehicles.”

One trip to Englewood, Colorado is all you'll need to notice the extent of the city of Englewood's impressive commitment to operating natural gas vehicles (NGV). Long a proponent of natural gas as a motor fuel, the city of Englewood has 45 NGVs, 18 of which are General Motors (GM) natural gas vehicles.

And, thanks to the diversity of General Motor's line-up of natural gas-powered vehicles, fleet administrator Pat White can spread his NGVs around to a variety of department giving many of the city's 400 employees to enjoy the benefits of clean-burning natural gas.

GM's presence in the city's fleet starts with the two 2001 Chevrolet Cavaliers, a bi-fuel, four-door sedan with a 2.2. liter engine and 6.2 gasoline gallon equivalent (gge) CNG tank, an application that White places at city headquarters. "These vehicles are used by our staff," he says.

The city also operates several GMC 3/4-ton pick-ups as regular field trucks travelling daily around this suburb of Denver. The pick-ups are all bi-fuel and either model year 1999 or 2000. One is a four-wheel drive model.



White recently added two 2002 bi-fuel Chevy Vans. General Motors offers the Chevrolet Express 2500 and 3500 van in passenger and cargo configurations with a bi-fuel or dedicated compressed natural gas (CNG) option. Each version is equipped with a Vortec 6.0-liter engine and natural gas fuel capacity of 11.2 gge. GM also offers many of the same capabilities in the GMC Savanna model. The city of Englewood uses their new vans in their Parks and Recreation department.

Thanks to the efforts of its city government and natural gas vehicles from General Motors, Englewood's 30,000 residents can feel good about their community's commitment to clean air.

For more information on General Motor's line-up of natural gas-powered vehicles, contact Jennifer Frechette, General Motors Corp., at 313-665-6472.



Advanced Vehicle Systems Inc.

Kirk Shore
p: 423-821-3146 • f: 423-821-0042
www.avsbus.com

Alternative Fuels Technologies

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American Honda Motor Co. Inc.

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Autocar

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Baytech Corp.

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Blue Bird Corp.

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Rusty Mitchell

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Champion Bus Inc.

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Chance Coach Inc.

Richard Carlon
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Clark Material Handling Co.

Mike Hepler
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Clean Air Partners

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www.cleanairpartners.com

Crane Carrier Co.

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El Dorado National

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www.laseter.com/eldorado.htm

Elgin Sweeper Co.

Brian Giles
p: 847-741-5370 • f: 847-742-3035
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www.elginsweeper.com

Ford Motor Company

Ford Alternative Fuels Dept.
p: 877-ALT-FUEL
www.fleet.ford.com

Freightliner Custom Chassis Corp.

Bryan R. Henke
p: 864-487-1700 • f: 864-487-6400
www.freightlinerchassis.com

Freightliner Trucks

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Dennis Manchester - Condor

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General Motors Corp.

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Orion Bus Industries

Mark Brager
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e-mail: mbrager@orionbus.com
www.orionbus.com

Peterbilt Motors Co.

Bob Wood
p: 925-556-7469 • f: 925-556-7473
e-mail: bob.wood@paccar.com
www.peterbilt.com

Resurface Corp.

Kathy Freeborn
p: 519-669-1694 • f: 519-669-8896
e-mail: info@resurface.com

Solectria

Doug Alderton
p: 978-658-2231
www.solectria.com

Specialty Vehicles Inc.

Dale Deline
p: 800-784-8726 • f: 714-848-2114
e-mail: svi1@ix.netcom.com
www.specialtyvehicules.com

Starcraft Bus

Art Henderson
p: 800-348-7440, x.202
e-mail: ahenderson@forestriverinc.com
www.forestriverinc.com

Sterling Truck Corporation

Jim Crowcroft
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www.sterlingtrucks.com

Supreme Corp./Startrans Bus Division

Samuel Craig
p: 877-258-1391 • f: 574-642-4108
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www.startransbus.com

Thomas Built Buses

Ken Heagecock
p: 336-889-4871 • f: 336-841-5734
www.thomasbus.com

Tiger Tractor/ATaylor-Dunn Co.

Joe Conway
p: 816-525-3900 • f: 816-525-8878
www.tigermfg.com

TransTeg

Dale Hill
p: 303-382-1041
e-mail: dale.hill@transteg.com
www.transteg.com

Trolley Enterprises Inc.

Joe Perez
p: 954-429-3100 • f: 954-429-3307

TYMCO Inc.

Bobby L. Johnson
p: 800-258-9626 • f: 254-799-2722
www.tymco.com

Western Star Trucks

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Wittke

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Yale Materials Handling Corp.

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Zamboni

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