



IS YOUR FLEET ACTUALLY A CNG FIT? A ROUTE SCORECARD



PRESENTED BY CHEVRON

Diesel prices aren't getting any friendlier, and fleet managers heading into 2027 budget season are looking hard at alternatives. Electrification isn't there yet for most heavy-duty applications, and hydrogen remains years away from practical fleet use. Compressed natural gas (CNG), on the other hand, is available today: it's a domestically sourced, drop-in fuel with an established engine platform and a growing station network across the country.

But CNG isn't a fit for every fleet. Whether it makes sense depends on a handful of concrete factors: how many miles you run, what kind of routes you drive, how close you are to fueling, and how you plan to fuel in the first place. This scorecard walks through those factors one at a time so you can size up your own fleet before making the call.

Keep your own situation in mind as you work through the criteria below, since the "right" answer to several of these questions depends on which path you're evaluating.

A QUICK NOTE BEFORE YOU DIG IN

CNG fueling comes in three flavors, and the economics shift depending on which one applies to you.

- **Build-your-own station**— The lowest cost per gallon, but the highest upfront capital investment.
- **Third-party-owned station (financed, built, and operated by another company)**— Lower CapEx, but a higher per-gallon cost to cover the provider's financing and margin.
- **Public fueling network**— No CapEx at all, but availability and pricing depend on your route running near a public station.



THE ROUTE SCORECARD

1 DAILY MILEAGE

The more fuel you burn, the more you save; that's the core economic logic behind CNG. Fleets racking up high daily mileage see the fuel-cost differential compound fast, which is why CNG has historically found its footing with high-utilization operations rather than fleets that log modest daily totals. If your trucks are only burning a small amount of fuel each day, the payback math gets harder to justify regardless of which fueling model you use.

2 ROUTE TYPE

Not all route types are created equal for CNG. Return-to-base and regional-haul operations, where trucks come back to a predictable location on a predictable schedule, remain the strongest fit today. Industries that lean this way include ready-mix concrete, drayage, food and agriculture processing, logging, mining, oil and gas, and refuse/recycling. Less-than-truckload (LTL) carriers have also found strong success with CNG, since their hub-and-spoke networks create the same kind of predictability.

Long-haul, by contrast, is the application CNG was originally expected to dominate, since long-haul trucks burn the most fuel. In practice, though, thin public fueling infrastructure has made pure long-haul a harder sell so far. That's shifting as adoption grows, but for now, route predictability matters more than raw mileage alone.

3 DISTANCE TO FUELING

"How far is too far?" depends heavily on which fueling model you're evaluating:

- If you're building your own station, distance to a public network matters far less; your infrastructure travels with your routes.
- If you're relying on a third-party or public station, tighter proximity and reliable access become critical, since a detour to fuel eats into the cost savings you're chasing.

Also worth factoring in: station density today isn't necessarily station density in three years. CNG infrastructure continues to expand, so a route that's marginal now may look different by the time a truck purchase actually pays off.

4 DUTY CYCLE

Stop-and-go, urban duty cycles behave differently than steady highway running, and that affects both fuel economy and range planning. Fleets with heavier idle time or frequent starts/stops should factor that into their range expectations rather than assuming highway-cycle numbers will hold.

On the range question itself: modern CNG tank packages have largely put "range anxiety" to rest. Hexagon Agility, one of the leading manufacturers of CNG fuel systems for heavy-duty trucks, offers a 175-diesel-gallon-equivalent tank package that can comfortably support 700, and in some cases up to 800, miles on a single fill. In practice, that means most drivers will need a federally mandated break before they'll ever need to refuel.

5 MPG AND FUEL SPEND

Diesel has been running well above \$5.50/gallon nationally in recent months, with prices even higher on the West Coast, and has proven volatile amid ongoing geopolitical pressure on crude and refined product markets. CNG's cost per diesel-gallon-equivalent (DGE) varies by fueling model:

- Owning your own station:
roughly \$0.50-\$1.00/DGE
- Third-party-owned station:
roughly \$2-\$3/DGE

Either way, the spread against current diesel pricing is significant, and has only widened as diesel prices have climbed. Fleets should dig deeper into cost specifics for their own situation, though, since pricing varies by location, fueling model, and contract terms. Chevron and other fuel providers are happy to walk through pricing scenarios directly.

6 PAYBACK TIMELINE

This is where fleets need to be realistic. While a handful of scenarios have produced payback in under three years, the typical payback window runs three to six years. That matters if your fleet turns vehicles over on a shorter cycle (many 3PL and leased fleets replace trucks every four years or so), since the current CapEx delta between a CNG and diesel tractor, in the \$70,000-\$80,000 range, needs time and fuel volume to close. It's also worth knowing that the secondary market for used CNG trucks remains thin today, which can affect resale value if you're planning to turn vehicles over on a tight cycle.



GETTING STARTED: YOUR NEXT STEPS

Decided CNG looks like a fit? Here's how fleets coming off diesel typically approach the transition:

- 1 Confirm your fueling model.** Decide whether you're building your own station, partnering with a third-party provider, or relying on public infrastructure, since this shapes your CapEx, timeline, and contract structure.
- 2 Right-size your route analysis.** Map your actual daily routes against the criteria above before committing to a vehicle order.
- 3 Understand the engine.** Today's natural gas engines, including Cummins' X15N, are drop-in platforms purpose-built for CNG. No costly retrofits or major modifications are required to run compatible vehicles.
- 4 Plan for training.** Drivers and maintenance staff will need some orientation to CNG-specific procedures, even though day-to-day operation is largely similar to diesel.
- 5 Line up fueling contracts early.** Whether you're going with a third-party provider or a public network, lock in pricing and access agreements before your vehicles arrive, not after.
- 6 Budget for the CapEx gap with eyes open.** Go in with a realistic view of the payback window (three to six years for most fleets) rather than assuming best-case numbers.

ALREADY RUNNING CNG? IT'S WORTH A SECOND LOOK

This scorecard is built primarily for fleets deciding whether to make the jump to CNG in the first place. But it's worth a note for fleets that have already made that move: the opportunity for established CNG fleets isn't limited to a single engine swap.

Cummins is seeing fleets transition from earlier 12-liter platforms, such as the ISX12N, to the newer X15N, particularly for heavier-duty applications where the 15-liter platform's added capability matters. The X15N delivers 500 horsepower and 1,850 lb-ft of torque, output that puts it in the same conversation as many diesel platforms rather than positioning CNG as a compromise.

But according to Cummins, the fleets seeing the greatest value from natural gas are looking at the bigger picture, not just the engine. That means investing across the ecosystem, from fueling infrastructure to matching the right engine, whether that's the L9N or X15N, to the right duty cycle. Fleets already running CNG may find real value in reassessing that full picture rather than assuming their current setup is the ceiling.

If you're curious what an upgraded platform actually feels like on your own routes, Chevron and Cummins jointly run a **CNG demo program** that lets fleets test the equipment firsthand before making a purchase decision.



INDUSTRY MOMENTUM

CNG adoption is picking up beyond its traditional base. Large less-than-truckload carriers have run natural gas fleets for years, and momentum is building in new corners of the industry, including automotive supply-chain movement and other shippers prioritizing lower-emission transport. Regulatory pressure is also a factor in states aligned with California Air Resources Board (CARB) standards, including Oregon, Washington, and increasingly New Mexico, where emissions requirements are pushing fleets to evaluate alternatives sooner.

The numbers back up the trend. Cummins expects X15N sales in the heavy-duty truck market to more than double this year compared with last year, with similar growth expected in 2027 as existing natural gas fleets hit their replacement cycles and move off earlier 12-liter platforms.

"Customers are looking for ways to lower operating costs while maintaining the performance and reliability their businesses depend on.

We're seeing natural gas adoption with fleets that are new to the technology, while experienced CNG fleets continue to expand and optimize their operations. The X15N is helping move that opportunity into more demanding applications, giving customers the 15-liter performance they need while providing the potential for meaningful fuel-cost savings. As customers look across their entire operation, we're seeing more opportunities for natural gas to deliver value."

MARK JAMIESON

BUSINESS DEVELOPMENT DIRECTOR
FOR ALTERNATIVE TECHNOLOGIES AT CUMMINS