Docket 24611: EPA/CARB/GHG Phase 2 Emissions and OBD2 Certification for Propane Powered Class 7 Bobtail Truck / Propane Powered Strip Chassis for Multiple Applications

Nexio Power Inc.

APPLICANT INFORMATION

Primary Contact: Horace Mast, COO & CTO
Email: horace.mast@nexio.team
Amount Requested: $ 6,000,000

Organization: Nexio Power Inc.
Phone:
Total Project Cost: $ 20,000,000

Start Date: 06/03/2025
End Date: 01/07/2028

Additional Vendors: AVL Mobility Technologies, Inc.
MAHLE Powertrain
ZF Friedrichshafen AG (ADAS & Braking)
Allison Transmissions (3500RDS)
BMC
IDIADA

EXECUTIVE SUMMARY

Funding Request Priority Area
Technology Development and Commercialization, Market Development

Project Summary

- *Briefly describe the proposed product or idea, its importance, its benefits, and the market and/or audience it serves. Briefly outline the scope of work.*

This request seeks partial funding through a PERC grant to support EPA on-road emissions certification, EPA and CARB Greenhouse Gas (GHG) Phase 2 engine and vehicle emissions certification, and CARB/EPA Heavy-Duty Onboard Diagnostics (HDOBD) certifications for NEXIO propane-powered vehicles and engines. Specifically, this funding will facilitate the certification of NEXIO's dedicated propane-powered, medium/heavy-duty Class 7 & 8 trucks, Class 5-7 stripped chassis, and 7.2L V8 engine for the U.S. market.

NEXIO, a U.S. company, is strategically important to the propane industry for the following reasons:

1.Propane Bobtail Delivery Truck: NEXIO is developing a medium heavy-duty propane-powered Class 7 & 8 bobtail propane delivery truck, with features focused squarely at the needs and requests of propane marketers, including a focus on safety, Total Cost of Ownership (TCO), configured with air disk brakes standard, and service first strategy; fulfilling PERC's commitment to this market segment.

2.Versatile Chassis: NEXIO will also develop, market, and certify propane-powered stripped chassis for various applications, targeting class 5 to 7 strip chassis for walk-in-vans, and other markets like RV.

3.Commercial Truck: NEXIO will provide vehicles for return to base markets like beverage, a day cab tractor and commercial truck product. These are specific truck applications that propane marketers have asked NEXIO to target. Participants in these markets are already propane customers, but a propane day cab and straight truck offering is missing from the market.

4.Return to Base: NEXIO plans to expand product offerings into any return-to-base market that values low total cost of ownership (TCO) over diesel and a simpler solution than electric.

5.Terminal Tractors: NEXIO has had prior success with the 7.2L V8 engine in port equipment and terminal tractors in Europe and expects to replicate this success in the USA.

NEXIO's product strategy significantly expands the Autogas vehicle portfolio and offers a powerful propane solution with performance and TCO better than diesel.

NEXIO unveiled its bobtail truck in August 2024, followed by ride-and-drive events to gather customer feedback, leading to design improvements and feature additions. The truck will be showcased at industry events in 2025 (NPGA SE, ACT, Western NPGA, Texas Crossroads). The certification process is scheduled for 2025-2026, with a production planned target of a full product portfolio rollout from Q4 2026 through Q2 2027. This roll out will include Class 7 straight truck, Class 8 straight truck, and Class 8 tractor.

NEXIO's vertically integrated engine and vehicle strategy, utilizing lean CKD assembly, allows for a faster time-to-market compared to previous PERC projects that required extensive OEM integration. This approach streamlines the process, covering engine R&D, vehicle integration, emissions certification, CARB approval, service, and commercialization via NEXIO as a single entity.

NEXIO's Engine Advantage

The NEXIO 7.2L V8 supercharged engine, in production since 2021 and already certified under Euro VI standards, is the highest-performing on-road certified propane engine globally. It powers port tractors, port forklifts, coaches, transit buses, and Class 8 commercial trucks, demonstrating positive customer acceptance. Laboratory testing confirms the engine's ability to meet EPA/CARB and GHG Phase 2 emissions standards.

The engine outperforms current and future medium heavy-duty diesel engines and is the first propane engine to achieve a torque rating that meets the requirements of the industry's standard automatic transmission, the Allison 3500 RDS. A transmission that meets today's expectations of PTO performance for delivering propane from a bobtail.

Value Proposition

Certification will enable NEXIO to provide the propane industry with propane-fueled bobtail trucks, replacing diesel-powered trucks that currently deliver 9 billion gallons of propane annually. The NEXIO propane engine and truck chassis offer:

1.Advantages over Diesel:
o~$21,000 annual operating cost savings per truck. (No Tax Credit - 7,500 Diesel Gallons)
o~$25,000 annual operating cost savings per truck. (Tax Credit - 7,500 Diesel Gallons)
oSuperior engine performance to MHD diesel and to any preceding LPG Autogas engine.
oSimplified service and better reliability to any preceding LPG Autogas engine.
oMore reliable and durable exhaust aftertreatment than current and future diesel.
oPromotion of propane use within the propane industry.

2.Advantages over Other Trucks:

oComprehensive standard safety features (lane departure warning, adaptive cruise control, automated collision avoidance, improved visibility, blindside detection).
oBetter maneuverability with tighter turning radius for both classes of truck.
oImplementation of vehicle features specifically for LPG bodybuilders and marketers, including improved integration of body harness, cabin harness, and ground level ticket printing.

Societal and Economic Benefits

NEXIO is establishing a corporate headquarters and engine assembly facility in Texas, creating over 500 jobs. The corporate headquarters and engine assembly facility will be located within a census tract that is categorized as a disadvantaged community according to the Climate and Economic Justice Screening Tool. This aspect has garnered support from U.S. Congress and the National Propane Gas Association.

CARB & Advanced Clean Truck (ACT) Advantages

NEXIO's classification as a small-volume manufacturer, under EPA and CARB rulings, allows the company to certify only engine emissions to GHG Phase 2 standards through 2032 and beyond. This exemption applies to both NEXIO-certified trucks and stripped chassis.

Critically, this exemption also applies to the CARB Advance Clean Truck rule. The ability to deploy a formal ACT "carve out" for CA and other aligned States is critical for Blue Star Gas and other marketers that sell propane on the West coast. Other truck OEMs are restricting bobtail sales into CARB territory and NEXIO has a clear path forward that is free of ACT restrictions.

Additionally, this GHG3/ACT carve out and NEXIO stripped chassis will avoid the final vehicle manufacturer from needing to implement hybrid or full electric vehicle solutions long term. Using the NEXIO platform will eliminate the requirement for the final vehicle manufacturer to purchase or produce EV sales credits under the current regulations. All other manufacturers are impacted by the requirements of ZEV credits for their business model.

This adds to the existing solid business case and value proposition.

Conclusion

This docket and the certification of the products that it represents will help deliver on-road powertrain technology with performance greater than medium heavy duty diesel and unique regulatory status that will yield significant value and fuel sales growth for the propane industry, especially in CARB States. By:

1.Reducing reliance on diesel in propane delivery: By funding certification for NEXIO trucks, and in doing so, displacing diesel-fueled vehicles, this docket will deliver a solution that has the potential to eliminate diesel dependence.

2.Capitalizing on growth markets with NEXIO technology: NEXIO technology will be a catalyst for expanding propane use in applications like day cab tractors, day cab trucks, return to base applications such as beverage delivery, and parcel delivery. This project delivers the capability to drive the adoption of propane in these vehicles.

Strategic Importance

- *Describe how this initiative supports PERC's strategic plan including the strategic pillars.*
- *Describe how this initiative is important to the propane industry.*
- *Describe how this initiative helps achieve PERC's aspiration to increase uses and users.*
- *Explain why this docket is critical to achieving your goal.*

This docket directly and actively supports the following headline growth objective taken from the PERC 2023-2025 strategic plan located on Propane.com.

IMPLEMENT A MARKET STRATEGY THAT PARTNERS PROPANE WITH COUNTER-SEASONAL DEMAND FOR BTUs AND GROW TOTAL PROPANE MARKET SHARE.

In rapidly bringing to market products that are currently only serviced by diesel, it seems clear that this docket supports the goal of immediately increasing propane consumption.

EDUCATE THE PROPANE INDUSTRY ABOUT AVAILABLE PROPANE AUTOGAS EQUIPMENT, GROW THE SERVICE NETWORK, AND FACILITATE THE SALE OF UNITS.

The wider industry lacks knowledge and confidence in the availability of equipment and service networks to adopt Autogas in its own fleets, and this impacts growth.

Autogas growth is impeded by a lack of suitable propane-fueled engines that offer the required performance and durability for certain market products dominated by diesel. By offering Autogas products that directly service the needs of customers in Class 7, Class 8, and day cab tractor, NEXIO will facilitate the increased sale of Autogas units by providing a diesel alternative.

NEXIO offers a clear opportunity to address the goals of PERC's strategic plan.

DETAILED BUSINESS CASE

Scope–

- *List the activities paid for by this docket only (research, consultants, sponsorships, etc.)*

Certification Activities and Partnerships

This docket's funding will primarily support certification activities performed by AVL Mobility Technologies, Inc., a global engineering consultancy specializing in mobility solutions for improved vehicle safety and emissions reduction. AVL will partner in achieving the required certifications, which include:

1.Engine Emissions and GHG Testing: Dynamometer testing to measure engine emissions and greenhouse gas output. Emissions, catalyst, exhaust system, and calibration development on dynamometers to produce the best performing emissions and GHG performance.

2.Vehicle Emissions and GHG Testing: Real-world testing of at least seven trucks to assess vehicle emissions and greenhouse gas output. Real-world emissions testing performed in the most diverse set of operating environments, including hot temperature high altitude, hot temperature low altitude, low temperature high altitude, and low temperature low altitude.

3.Engine HDOBD Software & Certification: Certification of the engine's Heavy-Duty Onboard Diagnostics (HDOBD) system for CARB and EPA compliance. Including a full HDOBD demo.

These certifications represent a substantial portion of NEXIO’s overall budget.

Engine and Vehicle Controls

DANA Open ECU is the current partner for engine control hardware, but the software is open source, so the software is developed and owned by NEXIO. This collaboration provides perpetual Simulink licenses, including support and maintenance and on-site engine calibration. The DANA Electronic Control Unit (ECU) is a high-functionality module designed to manage up to 8-cylinder engines. It supports a wide array of automotive sensors and actuators, ensuring accurate engine management. NEXIO's software will ensure compliance with the latest OBD standards, including those set by CARB, EPA, and the EU.

It's important to note that this funding is not for engine development or mechanical validation. The engine has already proven in demanding applications, and NEXIO will conduct an extensive in-field bobtail validation program from late 2025 through 2026.

Vendor Capabilities

- *Describe why applicant is suited to complete this work including technical capabilities. Describe ability to commercialize the product (production, distribution, warranty). Discuss similar work completed. Identify personnel expected to work on this project. Who is responsible for creating deliverables – content/research/data/etc.? What’s the review process and who is involved? List any external agencies or outside organizations that will be utilized and identify the purpose for which they will be needed*

Commercial: Gary Winemaster, CEO, will lead early commercialization; engaging with propane industry leaders, bobtail truck builders, and potential stripped chassis OEMs. He brings a proven entrepreneurial skill, focused on rapid, high-quality commercial success. A wider team will support him from mid-2025.

Technical: Horace Mast, CTO/COO, will oversee technical aspects, including

R&D, certification, specifications, and operations. His expertise stems from engine design consultancy, development, and commercialization, providing a strong foundation.

Service: Joe Serbin, NEXIO's VP of After-sales and Customer Success, is formulating NEXIO's service strategy. He has 41 years of automotive and customer service experience, including roles as master technician, service writer, and service manager for major automotive OEM dealerships. Additionally, he spent the last decade developing and implementing service strategies for the autonomous vehicle companies UBER ATG and ARGO AI across the U.S.

For additional vendor service capability content, please see attached document - "Service V2.0".

Industry Engagement –

- *Does this project require propane industry stakeholders' involvement to be successful?*

Yes

- *How will you engage industry stakeholders?*

NEXIO Propane Bobtail -
The key stakeholders are:

A)Propane marketers as potential customers. This group has been engaged throughout 2024 as part of active VOC plus ride and drive programs. Feedback from this group has been implemented within the design of the truck, with reference to cabin design, standard vehicle functions, and driver ergonomics.

B)Truck builders will be one of the channels to market for the bobtail truck. A percentage of marketers order their vehicles via the truck building industry. The NEXIO team will meet directly with truck builders to teach the fundamentals of the vehicle and to receive feedback on truck design and implment changes. Webinars and video conferences are planned also.

C)Propane stripped chassis
The propane industry engagement here is really limited to the supply of fuel, and helping to educate OEMs relative to propane value and infrastructure. NEXIO is engaged with the largest independent dealer of stripped chassis that currently services the RV and other markets.

The expectation is that PERC will provide marketing and promotional input for all NEXIO projects.

Cost/Benefit Analysis –

- *What is the potential impact? (i.e., NPV, new gallons, units sold, persons trained, propane industry resource savings, safety, consumer education, etc.)*
- *What are the potential risks to achieving the impact? (i.e. fuel price; regulatory, environmental, or legislative considerations; propane marketer support)*
- *Are other parties or organizations involved?*
- *For products:*
    - *Provide five-year estimated sales projections for the product (if applicable) and a list of factors that may influence the estimates.*
    - *How many gallons of propane does the product use per unit per year?*
    - *Provide best, worst, and intermediate projection scenarios and describe what variables contribute to each scenario*

NEXIO presents a significant counter-seasonal gallons growth opportunity. One that is vital for the propane industry and PERC.

Bobtail truck fleet:

Here the propane sales volume growth AND savings to the industry are compelling.

Total NA Bobtail and Cylinder Delivery Truck Population = 35,000
Average miles driven per day = 120mi
Average diesel fuel economy 4mi/gal
Average fuel consumption = 7,500 gal/year/truck
= 262.5MM gallons diesel / year

NA Bobtail & Cylinder Delivery Fleet Turnover = 3,500/yr (est)
Opportunity to add 26.25MM diesel gallons equivalent of propane each year.
Diesel cost $4.29/gal. - ~$112,612,500
Propane at cost price = $0.65/gallon w. tax credit and energy conversion = $26MM
Propane at cost price = $1.00/gallon wo. tax credit and energy conversion = $40MM
A year-on-year fleet turnover driven incremental industry saving of $72.6MM per year if the tax credit is not reinstated and an industry savings of $86.6MM if it is reinstated.

For the propane retailer, the ROI for each truck is < 4 years on fuel alone considering trade in value.
Over a ten-year period, each propane truck will save propane marketers over $263,000 versus diesel

Fully Converted NA Bobtail and Cylinder Delivery Fleet = 35,000 vehicles
400M gallons LPG / year
Diesel cost $4.29/gal. - $1.126 Billion
Propane at cost price = $0.65/gallon w. tax credit and energy conversion = $260MM ($400MM wo tax credit)
Industry Savings Running Propane = $866MM per year. ($726MM wo tax credit)

This project has a real impact on the midstream elements of the propane value chain.

Conversion of the total propane bobtail fleet will realize $340MM in increased revenue for mid-stream supply participants. This is based on the diversion of propane previously exported at low pricing, to US wholesale consumption.

NEXIO US truck and chassis manufacturing capacity/sales plan. Estimated annual units. Volumes shown include all NEXIO's vehicle products, including 4x2 and 6x2 class 7/8, stripped chassis, day cab tractors, and port tractors.

2027 – 1000/425
2028 – 3000/1300
2029 – 3000/2625
2030 – 6000/4300
2031 – 8000/6050

Day Cab, Return to Base, & Stripped Chassis – Displace Diesel!

Day Cab Tractor - A strategic and addressable market with a Medium Heavy Duty Class 8 that NEXIO will bring to the market. With over 3000 units in estimated annual sales for single rear axle day cab, the day cab tractor is a return to base market that continues to be dominated by diesel.

Day Cab Beverage trucks – Whilst a smaller market than the walk-in van fleet, with the removal of incentives for BEV’s, the MD beverage market is worth an approximate 3500 vehicles annual sales, with a fuel burn commensurate with walk in vans.

Medium duty walk-in vans – An addressable US/Canada market of over 36,000 annual fleet sales between class 4 and 6. Package delivery, food and beverage delivery, laundry, and specialty vehicles make up the bulk of this wide market.
Package delivery accounts for over 50% of this total fleet, and it is here where NEXIO will focus. NEXIO has deep OEM level contacts and is prepared to promote propane like low TCO, low emissions, and simple alternative to diesel.
Over a typical ten-year life cycle the NEXIO chassis as a class 6-7 walk in van solution will save fleet operators approximately $300,000 in fuel costs per vehicle.
Using this as a key pitch, the NEXIO sales plan is to achieve 25% of the national MD walk-in-van fleet by 2030. The volumes associated with this sales forecast will increase propane sales volumes by an approximate 15-20MM gallons per year, based on highly conservative daily mileage estimates.

RV's – The annual sales for these vehicles exceeds 50,000 vehicles per year between now and 2030. An assessment of volumes for engines that the NEXIO 7.2 can power as a subset of this volume is required. However, versus diesel propane has a similar value proposition to other commercial applications. It is NEXIO intent to promote propane into RV OEMs, exploiting our ability to equal diesel performance, with simpler technology and lower cost fuel.

School buses – Propane volumes are landlocked at an approximate 15% of the production volume of a single school bus OEM, due to a publicly declared exclusivity agreement between the school bus OEM and incumbent engine OEM. it is impossible for propane to grow with other competing school bus OEMs. This is because there is currently no other on-road certified engine available today. The NEXIO certified stripped chassis, and 7.2 engine will enable propane to be offered into the school bus market, at a point in time when schools are keen for alternatives to diesel, and who cannot afford unsubsidized BEV buses.
It is estimated that the current propane fuel burn for existing school bus volumes is approximately 120MM gallons/year. Either NEXIO chassis or base engine sales should enable this figure to be doubled.

Risk Assessment

- *Identify 3-5 potential risks to the successful completion of the project or inability to meet outcome targets, how likely those are to happen, impact on the project, and how to resolve those risks.*
- *Indicate low, medium, or high for "Likelihood" and "Impact."*

Risk	Likelihood	Impact	Risk Resolution and/or Contingency Plan
NEXIO V8 Engine Durability	Low	High	The NEXIO V8 engine has completed rigorous design, development, and validation by industry experts. A European technological university, utilizing their research center, also provided independent validation. For three years, the university dedicated two Test Dyno Cells to the V8 project, supporting research, development, and durability testing of its components. These test cells, designed for alternative internal combustion engines, facilitated experiments across stationary, transient, and dynamic driving cycles compliant with European emission control legislation. The university also leveraged its capabilities to evaluate the engine against US EPA cycles. The NEXIO V8 propane engine has entered production and is integrated into the product plans of major large bus manufacturers, demonstrating a strong track record of

			reliability and durability. Confidence in the durability of our engine is high.
Customers will not accept a cab-over design	Low	Low	Our cab-over design enhances visibility, lowers the center of gravity, and optimizes the fuel tank to chassis length ratio. NEXIO aims to establish cab-over configurations as a safer truck standard, featuring advanced safety technology surpassing current market offerings. Traditional bobtail truck cabs often suffer from outdated, utilitarian designs, with ergonomics and comfort reminiscent of the early 1980s. NEXIO addresses this by providing a modern, comfortable "office" environment for drivers. Through extensive Voice of Customer (VOC) research with propane industry fleet experts, the NEXIO team has implemented key cab design improvements, including: 1. Reduced cab dimensions tailored to the day cab requirements of bobtail trucks. 2. Redesigned cab steps for improved ingress and egress, featuring 50% wider steps with a stair-like pitch, enhancing accessibility."
Service Dealer option does not meet customer needs	Low	High	NEXIO will implement a multi-tiered service support system, designed to meet the localized needs of the propane marketer network and adaptable for future customer profiles. NEXIO has recently hired Joe Serbin as VP of After-sales and Customer Success to construct, implement and develop the service first strategy. The tiers are: Major service networks, medium and small service centers, internal service centers and NEXIO technicians supplying remote and hands-on technical assistance. Major service networks - All major networks are being engaged to develop a service center strategy that connects NEXIO customers and bodybuilders to a service facility near or in their location for service, technician assistance and parts. NEXIO technicians will train the trainer and provide rapid technical support; including telematics and hands-on. Medium and small service centers - NEXIO will reach out to these individual service centers and provide the same services for training, maintenance, technical assistance and parts that larger centers would receive. NEXIO technicians will train the lead technician and provide rapid technical support; including telematics and hands-on on a micro focus aspect. Internal service centers - NEXIO will connect with Service Managers operating internal service operations to facilitate training, parts procurement and technician assistance. NEXIO technicians will train the trainer and provide rapid technical support; including telematics and hands-on. The NEXIO service center, a cutting-edge facility located at the NEXIO factory, will service the NEXIO internal fleet. NEXIO technicians will be based at the center to provide both technical support and training.

European Market Consumes NEXIO reducing validity of PERC Grant	Low	Low	NEXIO have declared formally and clearly that 85% of their vehicle production volume will be dedicated to the North American market, with the US as the significantly dominant market Vs Canada. Europe will at most represent 15% of NEXIO volume. Vehicles for EU will be assembled in the EU. The engines will be built on the NEXIO line in the US, and are in any case already EU certified.
Engine Supply is Not Guaranteed. There is the potential for disruption between MAST as a supplier and NEXIO as a customer	Low	Low	This risk was raised by a member of RTD. The risk is non-existent as NEXIO as a company now owns design control and intellectual property of the engine. The engines will be built at the NEXIO production facility. All tier 1 suppliers will sell directly to NEXIO, and NEXIO will own the certification. NEXIO will have its name on the emissions label. The NEXIO organization is truly engine and vehicle vertically integrated.
Engine performance shortfall versus Cummins diesel or Roush propane	Low	High	NEXIO torque - 775 ft-lb @ 1900 RPM Cummins B6.7 diesel - 750 ft-lb @ 1800 RPM Roush 7.3 - 468 ft-lb @ 2400 RPM

Budget

- *Outline cost per task, including estimated cost share (cash and in-kind).*
- *If applicable, indicate hourly rates, including overhead.*
- *Highlight contractor vs. pass-through costs.*

Total Cost of EPA/CARB/OBD2/GHG2 Activities = $20MM
This includes emissions test cell work and in field vehicle testing.

The contribution that NEXIO is seeking is a $6MM contribution.

Timeline

- *Provide a detailed timeline of all activities, tasks, and milestones. Include commencement and completion dates. List most responsible person for each task.*

The timeline is communicated in the section titled "Project Deliverables & Market Outcomes"

General Timeline as Follows:
Q4 2024: Design of US Cabin and Chassis
Q1 2025: Begin Engagement with Propane Stakeholders
Q2 2025: Design Freeze of Propane Industry-Specific Vehicle Features
Q2 2025: Design Freeze for US FMVSS
Q2 2025: USA OBD for LPG V8 Certification Testing Begins
Q3 2025: Vehicle Hot Testing in Extreme Hot Climates
Q4 2025: Engine Emissions Compliance Testing Completed with Production Catalyst Design
Q4 2025: 8-10 Propane Customer Demo Trucks Assembled for Industry
Q1 2026: Vehicle Cold Testing in Extreme Cold Climates
Q3 2026: FMVSS Type Approval
Q4 2026: EPA Application Submitted
Q4 2026: SOP of Vehicle Production Started

Q4 2026: EPA COC Received
Q4 2026: Customer Deliveries w/EPA COC

Market

Market – Geographical Reach

- *What is the geographical reach (national/regional?)*

National

Market – Target Audience

- *Who is the target audience?*
- *Why is the target audience important?*

Our customers are the fleet buyers for US propane distributors.
The "target audience" are important because to NEXIO they are potential decision making customer representatives.

The bobtail truck builders are also a key audience. it is NEXIO intent to work closely with them, to ensure that they are able to work effectively with NEXIO bobtail chassis.

For stripped chassis configurations, the initial target audience are large fleet customers of walk in vans and RVs followed by manufacturers of school bus OEMs . Specifically targeting these customers through a strategic delaer.

For the beverage industry and day cab tractors, the target customers are large fleet customers already serviced by US propane industries in other vehicle classes. The medium heavy-duty vehicle lineup offered by NEXIO will satisfy

Market – Market Research

- *Have you conducted market research in support of this project?*

Yes

Describe – PERC CEO Tucker Perkins, and Gav Hale have visited our facility as has Vice Chairman Chris Hill. We have met with NPGA's Steve Kaminski and staff. They have formally endorsed NEXIO.

We have met with leaders in the Propane Industry. Many have stated a desire to place orders. Key marketers have requested in use testing of customer demos.

We extended our VOC activity by showing a truck to the propane industry in Texas, Aug 2024, as well as many individual potential customer meetings.

Propane marketers utilization of diesel trucks is by necessity as there is no propane solution that is available. Prior Class 7 propane entries into the market have had setbacks such as not having the preferred Allison transmission model, and not being fully supported by either the engine or vehicle OEM. The Ford product is not and will not be available with air brakes and is considered underpowered.

Our engine, truck, and product lineup more than meets the requirements of the propane industry and of the drivers of propane bobtail trucks, who will really value our modern design with its combination of high performance, driver comfort, excellent ergonomics, visibility, maneuverability and airbrakes.

Market – Competitive Landscape

- *Describe: (cite source of market information)*
  - *The size of the market.*
  - *The rate of growth for the market.*
  - *The degree of competition in the market.*
  - *Ability to penetrate the market.*
  - *Main competitors*

The initial market and priority for NEXIO is the national propane bobtail and cylinder delivery fleet of approximately 35,000 vehicles, and selling sufficient vehicles into the market to meet and exceed the 10% annual fleet turnover.

Based on propane sales data communicated by PERC the actual propane market is not growing and the fleet is likely to remain at around 35,000. However, the sound financial advantage for propane distributors and return to base applications virtually guarantees that our growth trajectory will be achieved.

There is literally no equivalent product available from the competition. Ford does market a propane truck, but it is underpowered for the bobtail fleet application, has a complicated service history and does not offer airbrakes, and has low customer enthusiasm.

NEXIO is the only on-road EPA EPA-certifiable engine with forced induction that is in production. Other engine manufacturers are years behind us with a viable engine or a vertically integrated vehicle to market strategy approach.

Right now, the only viable option for the propane industry is to deliver propane nationwide using vehicles powered by the very fuel that PERC presents as dirty and environmentally damaging.

NEXIO is the only fast paced path to displace diesel fueled bobtail trucks from the nation's propane delivery fleet.

NEXIO is also the only path that can rapidly commercialize propane engines and chassis for school bus and other vocational vehicles, as detailed in the business case of this docket.. We are the only alternative to inefficient and non greenhouse gas compliant naturally aspirated engines, and the only path that genuinely mitigates current CARB and future GHG3 requirements without costly hybrid electric technology.

Market - Existing Offerings

- *Describe Market Leaders' positioning in the market – give examples.*

Propane bobtail trucks are currently totally reliant on diesel! Our task is to displace this fuel that for years has enabled the propane supply chain. PERC leadership reinforced its "displace diesel" clarion call during the December 2024 Propane Council meeting and this makes the propane fueled NEXIO bobtail and stripped chassis offering entirely compelling.

Diesel is the market leader - NEXIO can displace diesel with propane.

There is no other propane engine available today that can compete with NEXIO engine performance and efficiency. Other truck manufactures cannot solve the CARB ACT challenges. Other engine OEM's naturally aspirated propane engines cannot meet future GHG3 limits without hybrid technology or truly displace diesel from a performance standpoint, and that includes Bobtail trucks.

Stripped Chassis - Diesel, gasoline and EV. Propane buses are offered exclusively by Bluebird. NEXIO offers the only fast path to grow propane in last mile delivery, RV, and the student transportation markets.

Market - Positioning Strategy–

- *Outline a possible positioning strategy for the commercial launch of the new product.*
- *Share how current leaders are positioned in the market.*

NEXIO - The only propane fueled Bobtail truck and strip chassis offering that can displace diesel offering improved performance via simpler and more reliable technology
NEXIO – Delivers $20-$25K / truck annual operating cost savings to propane marketers
NEXIO - The only strip chassis offering that is exempt from CARB and future GHG3
NEXIO - The only strip chassis offering that does not need ZEV credits post 2027
NEXIO - The only supercharged propane fueled engine that is able to outperform diesel and significantly outperform existing propane fueled engines
NEXIO - The only bobtail truck solution that is future proofed from GHG3 that will not need expensive, complex and heavy hybrid power solutions, saving fleets millions in terms of reduced R+D and massively reduced vehicle cost, by avoiding hybrid and full electrification, while simultaneously growing significantly the sale of propane into a wide variety of vehicles.
NEXIO - Vehicle safety, quality, and ergonomic comfort far ahead of the existing diesel propane delivery trucks.
NEXIO - Rapid Return on Investment
NEXIO - Simpler servicing and aftertreatment (no DPF - no DEF!!!)
The propane industry can finally deliver fuel in a vehicle powered by propane and not diesel and start to do this in 2026.
NEXIO is the only chassis manufacturer that can offer a path to the propane industry that genuinely enables propane engine sales growth within student transportation, and other segments.

Market – Other Information

- *What other information do you think is necessary to provide for this project?*

NEXIO engaged Roland Berger, a top 10 global automotive consulting firm, to perform an independent 3rd party business analysis. More specifically, to validate NEXIO's key assumptions, including the selection of key certification partners, sales and service strategy, and geopolitical risks.

An excerpt of this confidential report shall be supplied to PERC "2025.04.11_Project Checkered Flag_Excerpt_report_NEXIO_PERC".

The excerpt covers the validation of key NEXIO assumptions requested by PERC:
1) Supply Chain
2) Sales and Service
3) Technology Strategy
4) Project Strategy
5) Geopolitical Context
6) Potential Emissions Regulation Changes
7) Potential Tariff Impacts

Leverage and Synergies

Other audiences–

- *How could the content be used by other markets or industry organizations?*
- *How could the contents be used with other audiences beyond the target audience?*

The target audience initially comprises decision makers in the propane retailing space, followed by senior decision makers in the strip chassis market.

Company strategy is to serve these markets via engine, vehicle or chassis sales and associated high-quality aftersales support.

As the output of this docket is certification to support NEXIO product strategy, it is not clear how this could be used with audiences other than those described

Development

Development - Potential Marketing, Communications, and Promotional Requirements–

- *Describe how the message(s) will be conveyed to the market.*
- *Identify opportunities to leverage existing channel(s). (i.e. ongoing outreach programs in other markets)*
- *Outline the marketing collateral that likely will be required.*
- *Describe the timeline for the activities above for the first three years.*
- *Identify 3-5 features and benefits the product or service will provide from a customer perspective.*
- *For products, Provide a Plan A and Plan B.*

1. Bobtail - Our sales effort is a direct approach to propane retailers and truck builders. This effort is already well underway.

2. Day Cab Tractor & Strip Chassis - Direct NEXIO sales team approach to OEMs with stripped chassis and day cab tractor via our dealer partner Pritchard. This effort has also been started.

Delivery

Delivery – Delivery Channels –

- *Describe the distribution channels*
- *What existing delivery channels will be used?*
- *Who is responsible for deploying/delivering product?*

Bobtail Direct Sales - NEXIO to sell directly to propane marketers and truck builders.

Bobtail Sales via NEXIO Online Portal - Reaching smaller fleets of independent retailers nationwide.

Day Cab Tractor sales via Pritchard Commercial Dealer Network - Reaching the large national customer fleets currently serviced by Pritchard.

Stripped Chassis - Direct sales from NEXIO to strategic OEMs and reaching the RV market through a strategic dealer partnership serviced by Pritchard.

Delivery – Partnership Outreach

- *Describe the channel to market – are there multiple channels?*
- *Describe alternate pathways to commercialization*
- *Describe outreach plans for OEMs*
- *Identify which groups will require training (for example, propane marketers, customer service staff, maintenance, and channel and distribution partners).*

- *What type of training is required? (i.e. marketer, safety, user training)*
- *Who needs training to deliver this program?*

Bobtail - Channel to market = Direct B2B truck sales, or via truck builders as prime paths with Pritchard Commercial offering a path for specific customers. Typically low volume or requiring finance.

Strip Chassis - Direct chassis and engine sales to key OEMs. These OEMs are responsible for their vehicle sales strategy. Additionally, reaching the RV market through a strategic dealer partnership serviced by Pritchard.

Bobtail - NEXIO will establish a service solution that will respect existing options and will have a significant vehicle service training element. The other elements suggested are not mission critical training wise.

NEXIO's Train the Trainer program includes, Autogas safety, new vehicle technology, fuel delivery systems, diagnostics, technical assistance as well as parts and warranty best practices. NEXIO technicians will connect with the lead technician at the customer identified service center to conduct all necessary training; in house or at NEXIO facilities.

Regular newsletters, bulletins, technician forums and site visits will be key to building a robust dialogue with all customer field technicians, regardless of service center size or location.

Delivery – Allied Partner Participation

- *Are there allied or strategic partners who will be engaged in this delivery?*

Yes. The one key partnership will exist between NEXIO and existing propane delivery system integrators. We will work with existing participants to ensure that the needs of the market are covered and that they can work with our product with minimal new content percentage (process or technology) The other key partnerships will be with our selected service partners across the entire U.S.

Customer service and Support Needs —

- *What are the customer service and support requirements?*
- *What service and support resources are required?*

Vehicle service and support is critical.

NEXIO After-sales Service & Customer Success teams are committed to supporting customer operational goals by providing optimal NEXIO vehicle performance and seamless daily operations.

NEXIO is building a strong organization dedicated to helping customers achieve maximum vehicle uptime and minimize total cost of ownership. NEXIO's continuing development will be driven by insightful customer feedback, ensuring the best possible service and support is delivered.

The NEXIO Service Portal will serve as a centralized hub for all technical information that customers and body builders may need, including service and parts manuals, labor operations guides and labor times, technical bulletins, service actions, recalls, diagnostic software, special tools, parts catalogs, inventories, shipping, and policies.

NEXIO will be fully engaged with customers through connected fleet applications, metrics analysis, regular scheduled consultations, feedback loops and site visits.

See attachment "Service 2.0" for the complete response.

Service Networks

- *Rate the maturity of the service networks based on geographic locations, depth of service, etc. (1 as the worst, 5 as the best)*

4

Describe:

NEXIO has recruited a VP of Service and Customer Experience to oversee service network implementation.

On the basis that existing service providers are capable of maintaining and repairing complex diesel trucks with intricate exhaust aftertreatment, NEXIO's simpler propane solution will present no significant learning curve; especially with concentrated training provided by NEXIO.

The balance of NEXIO's truck systems, whilst advanced versus current product, are no more complex than any other vehicle. Some of the safety features like adaptive cruise,
collision avoidance and lane keeping are new to the bobtail truck market, but are established technologies.

NEXIO's service center rollout strategy includes two simultaneous paths: collaborating fully with service centers chosen by customers and developing a nationwide network of service centers.

See attachment "Service 2.0" for the complete response.

Will training of current networks be required? –
Yes

What training material is being developed and how will it be deployed?: –
Yes, all service centers identified by the customer and NEXIO will be trained on the latest technologies through; train the trainer, online training forums and bulletins.

Please see attached document "Service V2.0" for further detail.

Are service and support developed through this project? –
Yes

- *What does an established network look like?*
- *What's the timeframe?*
- *What are the limitations?*

NEXIO is building a nationwide service network by partnering with established propane-competent facilities and thousands of service providers all across the U.S. Primary focus is to include service centers in the Detroit Diesel - Allison Service network, Pritchard Commercial service network, and Rush Truck Centers among others.

Please see attached document "Service V2.0" for further detail.

Is there a PERC website/learning center component that will need to be updated/created? –
No

Expected Launch Date–

- *State the target launch date/outreach kickoff*

2026-10-01

PERC Portfolio–

- *Describe where this project stands within the context of PERC's entire portfolio.*
- *Have there been previous PERC funded projects in this category? What results have been achieved with previous similar projects?*

We know that NEXIO is in the lead relative to the next generation of high-efficiency propane engines. We do not believe that Class 7-8 propane is a focus for other on-road vehicle or engine manufacturers, particularly those with a significant and guaranteed revenue from diesel product.

We see our engine and our ultimate ability to serve multiple applications as the first step to helping PERC develop a genuine high-quality engine portfolio. We see our vehicle lineup as the only propane-powered vehicle lineup that can truly support the propane bobtail industry with a propane solution.

We do not believe that any previous funded projects in this category have achieved full commercialization. Therefore, there are no truly successful projects in this category.

PERC's success in this category is not specifically known; however, what is known to NEXIO by direct engagement with marketers is that the current and previous products, such as the S2G are not meeting their needs. The information NEXIO has received from nationwide marketers that continue to operate an S2G fleet is that it is difficult to keep more than 50% of their fleet operational at any given time.

MEASUREMENT & EVALUATION

Project Deliverables and Market Outcomes

- *Detail how success will be measured for this project overall and by tactic, what the metric is, and when it will be achieved.*

Goal/Milestone	Project Deliverable or Market Outcomes	Metric	By Date	Tied to Payment Y/N	Payment Due upon completion
1 - Letter of intent issued by PERC	LOI received	More detailed service strategy communicated, bobtail LOIs received from major marketers, NEXIO company governance document communicated, initial stripped chassis sales plan in place, agreed company financials available to agreed and limited recipients	2025-07-31	Yes	$1,500,000.00

2 - Dealer agreement in place	Truck and chassis sales dealer network agreement		2025-08-29	Yes	$100,000.00
3 - EPA three-letter OEM code	Code released by the EPA establishing NEXIO as a vehicle manufacturer	Code available	2025-09-30	Yes	$100,000.00
4 - Bobtail purchase letters of intent from multiple marketers		LOIs from x10 marketers	2025-10-31	Yes	$100,000.00
5 - EPA / GHG Phase II engine emissions compliance confirmation	Compliance data available via lab testing	Compliance established	2025-11-28	Yes	$100,000.00
6 - Three sample development bobtail trucks available for marketer in-use testing	Trucks available for testing and customer feedback	Trucks built to customer POs	2026-01-30	Yes	$1,000,000.00
7 - Bobtail purchase orders in place from multiple propane marketers	Purchase orders received and accepted	POs from x10 marketers, for min x25 bobtails	2026-03-31	Yes	$750,000.00
8 - Engine production line commissioned	Engine production line capable of building engines using production processes and tooling	Engine production line inspected by PERC staff	2026-05-29	Yes	$500,000.00
9 - Vehicle production line commissioned	Vehicle production line capable of building bobtail trucks using production processes and tooling	Inspected by PERC staff	2026-07-31	Yes	$500,000.00
10 - Manufacturing facility and supply chain supports demand	Whole facility able to demonstrate order to delivery process for truck manufacture	Inspected and audited by PERC staff	2026-09-30	Yes	$500,000.00
11 - EPA certificate of conformity submitted	Documentation submitted to EPA	Confirmation that documentation delivered to EPA	2026-11-30	Yes	$500,000.00
12 - Service capability demonstrated	Demonstration that propane industry bobtail specific service strategy is capable of responding to vehicle issues and scheduled service needs	Customer feedback	2027-12-31	Yes	$350,000.00

Intellectual Property

Who owns the data and or intellectual property generated from this project? Describe:

NEXIO Power Inc.

Is this a new contractor? No

Budget Impact

- *Provide the budget market & activity this project will be impacting.*

Market & Activity	Amount Requested	Year Total	YTD Remaining	Remaining if Funded
2025 > Autogas (On-Road) > Product Development	$1,900,000.00	$2,003,808.00	$1,500,000.00	-$400,000.00
2026 > Autogas (On-Road) > Product Development	$3,750,000.00			
2027 > Autogas (On-Road) > Product Development	$350,000.00			

Does this project have a past funding history? No

Docket 24611 - NEXIO Service Content

Vendor Capabilities

Service: Joe Serbin, NEXIO's VP of After-sales and Customer Success, is formulating NEXIO's service strategy. He has 41 years of automotive and customer service experience, including roles as master technician, service writer, and service manager for major automotive OEM dealerships. Additionally, he spent the last decade developing and implementing service strategies for the autonomous vehicle companies UBER ATG and ARGO AI all across the U.S.

The technical service function, comprised of highly experienced, seasoned master technicians with expertise in diagnostic procedures, will be NEXIO employees who have direct connections to both customers and engineering staff. NEXIO technicians will train the trainer inside customer service centers as well as provide telematic and/or hands on diagnostic assistance whenever necessary.

To provide fast and efficient vehicle repairs and maintenance across the United States, NEXIO is partnering with major service networks, small and medium service centers, and internal service centers of larger propane supplier companies.

Parts inventories will be accessible by partners and customers via digital portals, phone and email ordering and fulfilment that afford NEXIO to ship quickly anywhere in the U.S. Warranty policies and procedures will be well defined and accessible.

Delivery Partnership Outreach

Identify which groups will require training (for example, propane marketers, customer service staff, maintenance, and channel and
distribution partners).
What type of training is required? (i.e. marketer, safety, user training)
Who needs training to deliver this program?

NEXIO’s Train the Trainer program includes, Autogas safety, new vehicle technology, fuel delivery systems, diagnostics, technical assistance as well as parts and warranty best practices. NEXIO technicians will connect with the lead technician at the customer identified service center to conduct all necessary training; in house or at NEXIO facilities.

Regular newsletters, bulletins, technician forums and site visits will be key to building a robust dialogue with all customer field technicians, regardless of service center size or location.

Risk Assessment

Risk:
Service Dealer option does not meet customer needs
Likelihood:
Low
Risk Resolution and/or Contingency Plan(s):

NEXIO will implement a multi-tiered service support system, designed to meet the localized needs of the propane marketer network and adaptable for future customer profiles.

NEXIO has recently hired Joe Serbin as VP of After-sales and Customer Success to construct, implement and develop the service first strategy.
The tiers are: Major service networks, medium and small service centers, internal service centers and NEXIO technicians supplying remote and hands-on technical assistance.

Major service networks - All major networks are being engaged to develop a service center strategy that connects NEXIO customers and bodybuilders to a service facility near or in their location for service, technician assistance and parts. NEXIO technicians will train the trainer and provide rapid technical support; including telematics and hands-on.

Medium and small service centers - NEXIO will reach out to these individual service centers and provide the same services for training, maintenance, technical assistance and parts that larger centers would receive. NEXIO technicians will train the lead technician and provide rapid technical support; including telematics and hands-on on a micro focus aspect.

Internal service centers - NEXIO will connect with Service Managers operating internal service operations to facilitate training, parts procurement and technician assistance.
NEXIO technicians will train the trainer and provide rapid technical support; including telematics and hands-on.

The NEXIO service center, a cutting-edge facility located at the NEXIO factory, will service the NEXIO internal fleet. NEXIO technicians will be based at the center to provide both technical support and training.

Delivery - Allied Partner Participation

Are there allied or strategic partners who will be engaged in this delivery? Yes.

The one key partnership will exist between NEXIO and existing propane delivery system integrators. We will work with existing participants to ensure that the needs of the market are covered and that they can work with our product with minimal new content percentage (process or technology) The other key partnerships will be with our selected service partners across the entire U.S.

Customer Service and Support Needs

NEXIO After-sales Service & Customer Success teams are committed to supporting customer operational goals by providing optimal NEXIO vehicle performance and seamless daily operations.

NEXIO is building a strong organization dedicated to helping customers achieve maximum vehicle uptime and minimize total cost of ownership. NEXIO's continuing development will be driven by insightful customer feedback, ensuring the best possible service and support is delivered.

The NEXIO Service Portal will serve as a centralized hub for all technical information that customers and body builders may need, including service and parts manuals, labor operations guides and labor times, technical bulletins, service actions, recalls, diagnostic software, special tools, parts catalogs, inventories, shipping, and policies.

NEXIO will be fully engaged with customers through connected fleet applications, metrics analysis, regular scheduled consultations, feedback loops and site visits.

Service Networks

Rate the maturity of the service networks based on geographic locations, depth of service, etc. (1 as the worst, 5 as the best)

4

Describe:

NEXIO has recruited a VP of After-sales and Customer Success with an extensive, successful background of implementing service networks throughout the United States.

On the basis that existing service providers are capable of maintaining and repairing complex diesel trucks with intricate exhaust aftertreatment, NEXIO's simpler propane solution will present no significant learning curve; especially with concentrated training provided by NEXIO.

The balance of NEXIO's truck systems, whilst advanced versus current product, are no more complex than any other vehicle. Some of the safety features like adaptive cruise, collision avoidance and lane keeping are new to the bobtail truck market, but are established technologies.

NEXIO's service center rollout strategy includes two simultaneous paths: collaborating fully with service centers chosen by customers and developing a nationwide network of service centers.

NEXIO will promptly evaluate the safety and technical needs of all Service Centers identified by customers to ensure they can safely and competently perform the required repairs and maintenance on propane-powered vehicles. NEXIO will provide the necessary support to fulfill these requirements.

NEXIO is building a nationwide service network by partnering with established propane-competent facilities and thousands of service providers all across the U.S. Primary focus is to include service centers in the Detroit Diesel - Allison Service network, Pritchard Commercial service network, and Rush Truck Centers among others.

Bobtails are an inherently complex conglomerate of different manufacturers. NEXIO establishes the relationship between all these various manufacturers in a clear, transparent manner. NEXIO will facilitate diagnosis and repairs for all merged systems whenever necessary.

Cab (body), chassis, engine and running gear; service and warranty by NEXIO.
Transmission; service and warranty by Allison.
The bobtail (or body) installed by a body builder; the body and its components service and warranty by the builder of record and fully supported by NEXIO and the connected service network.
The bobtail tank, if installed by NEXIO; service and warranty by NEXIO.

Responsibilities for Service and Warranty - All issues fully supported by NEXIO

	Engine	Transmission	Autogas fuel system	Chassis/ Running Gear	Cab (Body) interior/exterior	Propane Tank/Delivery System	Built body
NEXIO Cab/chassis	NEXIO	Allison	NEXIO	NEXIO	NEXIO	Body builder of record	NA
NEXIO Stripped Chassis	NEXIO	Allison	NEXIO	NEXIO	NEXIO	NA	Body builder of record
NEXIO Tractor	NEXIO	Allison	NEXIO	NEXIO	NEXIO	NA	NA
NEXIO Bobtail	NEXIO	Allison	NEXIO	NEXIO	NEXIO	NEXIO	NA

Will training of current networks be required?

Yes, all service centers identified by the customer and NEXIO will be trained on the latest technologies through; train the trainer, online training forums and bulletins.

What training material is being developed and how will it be deployed?

NEXIO will develop a train the trainer program to upskill connected service centers. This program will identify and assess the needs of each service center and provide the necessary resources to achieve desired levels of technical ability.

Additionally, NEXIO will proactively update training and technical information through online programs, bulletins, outreach, and site visits.

NEXIO technicians will also provide rapid technical support, including telematics and hands-on assistance, and will train the lead technician at each service center location.

The lack of qualified technicians is a worrying trend that is likely to create limitations. NEXIO plans to participate in local and national programs to increase technical knowledge and generate enthusiasm for the heavy truck service industry.

Project Deliverables & Market Outcomes

Goal/Milestone = Service Strategy Confirmed
Project Deliverable or Market Outcomes = Presentation to Propane Industry
Metric = NA
By Date = September 15, 2025
Tied to Payment = Yes
Payment Due upon Completion = $250,000.00

Project Checkered Flag- NEXIO Business Plan Validation

Final report – 01.09.2025 PERC Excerpt

01.06.2025

Roland Berger

Executive summary

NEXIO management assumptions on Supply Chain and Sales & service (S&S) are reasonable– S&S execution will be key to driving pace of market adoption

NEXIO assumptions, RB view and NEXIO clarifications (2/3)

Section	NEXIO's assumptions	RB's views on assumptions	Flag	Elements that need NEXIO mgmt. focus
Supply chain- BMC	NEXIO's contract with BMC is as per industry standards	Assessment doesn't indicate any major shortcomings (clear definition of timelines, defined costs, etc.+has built-in flexibility to adapt to changes in future needs)		n/a
	Turkish currency devaluation does not impact BMC-NEXIO supply model	NEXIO's procurement contract ensures it pays in USD (pegged to EUR with defined USD-EUR boundaries)		n/a
Supply chain- Others	NEXIO is using trusted suppliers for its vehicle	NEXIO has contracted reputable suppliers for its key vehicle components		n/a
Sales and Service (S&S)	NEXIO's proposed sales model will be able to reach its intended customers	Reasonable: There are several successful examples of new entrants successfully using a similar model and NEXIO has engaged capable partners		NEXIO should continue its conversations with small fleets to assist with NEXIO's sales channel development (will maximize customer reach)
	NEXIO to directly train customer staff and upskill their preferred 3rd party service centers	Several new entrants have successfully used this model ·NEXIO benefits from the service profile of Propane engine vehicles being like Diesel vehicles (unlike BEV or Hydrogen) which makes 3rd party servicing easier		n/a
	Ability for Pritchard to meet end-customer service requirements	NEXIO and Pritchard's proposed service concierge model (train/support an extended network) can work as Pritchard team has prior experience in running similar models for new CV OEMs (Harbinger, REE, etc.); plus, propane engine maintenance is similar to diesel engine (unlike BEV or Hydrogen)		NEXIO should onboard anchor 3rd party brick and mortar service centers into its service network and continue expanding its network NEXIO needs to ensure service similar/ better than peers (access, quality & turnaround time)

Concerning | Mitigation strategy needed | Feasible, requires management focus | Feasible

Source: NEXIO, Roland Berger

NEXIO's truck bodies appear to meet all functional specs and benefit from better turning radius and custom features that will improve driver quality of life

Observations on NEXIO product

The NEXIO advantage

Current strengths

- Short turning radius
- Custom features based on user feedback
  - Side pockets to store equipment, documentation will minimize need to enter cabin
- Two fuel tanks instead of one

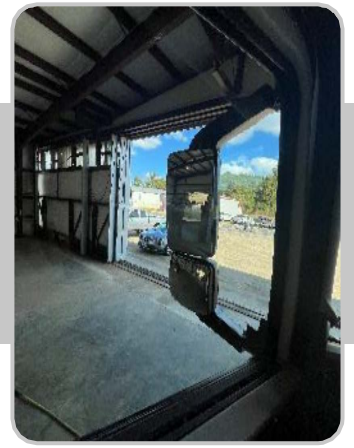
Ongoing NEXIO improvement plan

- Finalizing vehicle pre-check indicator system that will allow for easy vehicle check (without need for entering cabin)

Source: NEXIO Operations facility visit, Roland Berger

NEXIO's cabin design provides best-in-class comfort & easier driving (higher visibility and quieter operations)- being further improved basis user feedback

Observations on NEXIO product



- First design was EU steps and now being updated based on US customer feedback

Metal step grates added

Step area increase by 50%

Addl. grab handle added

The NEXIO advantage

Current strengths

- Better road visibility
- Smoother ride- low noise level

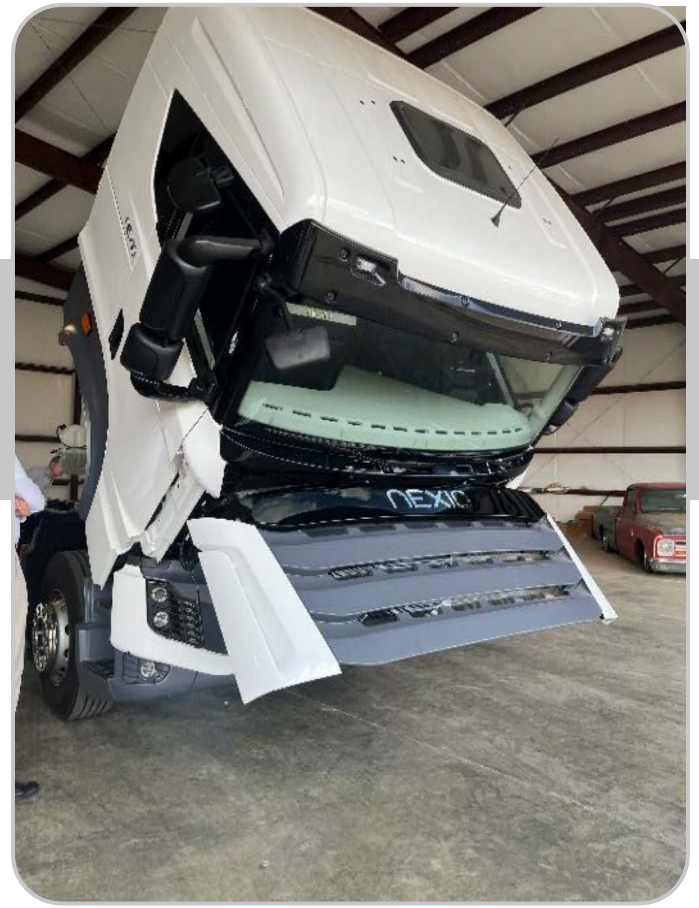
Future development

- Improve ease of ingress/egress
  - Textured steps (metal step grates added)
  - Additional grab handle added and being made high visibility (high contrast)
  - Step area increased by 50%
  - Evaluating potential to lower cabin floor height
- Rear cabin space being optimized based on user feedback

Source: NEXIO Operations facility visit, Roland Berger

NEXIO's powertrain and fueling system is designed for ease of upkeep, and planned improvements will further reduce perceived COE[1)] disadvantages

Observations on NEXIO product



The NEXIO advantage

Current strengths

- Ease of fueling due to being able to use propane distributor bobtail connectors if need arises (no need of additional equipment)

Future development

- Easier engine access
  - Reorientation to allow engine access without having to lift cab

1) Cab-over engine vehicle design

Source: NEXIO Operations facility visit, Roland Berger

NEXIO's bottom-up engine design concept (purpose built for propane) and test simulation results should help to alleviate customer reliability concerns

View on reliability of purpose-built engine design and feedback from Test simulations

Preference for purpose-built

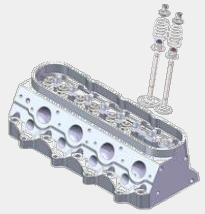
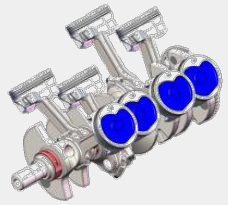
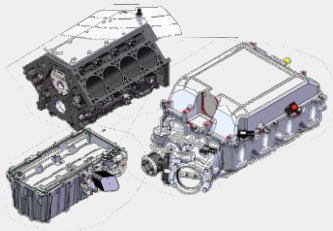
"When it comes to engine reliability and robustness, customers are more willing to trust/opt for a purpose-built solution"

–Director of Business Development, TIC Eng. Services provider

Testing feedback

Simulations on key NEXIO engine components (piston, etc.) completed & **validated NEXIO product meets all durability & fatigue requirements across intended vehicle life**

– MAHLE Test simulation

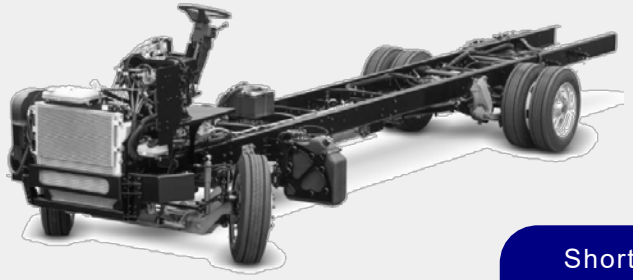
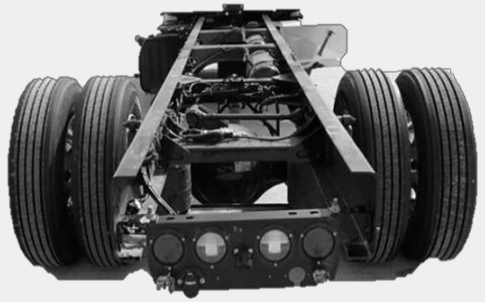
Engine system		Key components developed specifically for Propane technology
Valvetrain		• High strength Aluminum Cylinder head • New mat. for intake & exhaust value • Hardened valve face coatings • Hardened valve seat materials and valve guides • High life valve spring w/ specialized treatment
Crank train		• Forged high-strength crankshaft • Forged high-strength connecting rods • High life engine bearings • Special FEA optimized pistons
Others		• High strength iron block • High-capacity oil pan • Water cools exhaust manifolds

Source: NEXIO, Expert interviews, Roland Berger

NEXIO's chassis design meets regulation load requirements for Class-7 vehicles and offers like specs to Kenworth across braking and wheelbase

Chassis comparison- Performance & design

Outside-in view:
NEXIO's chassis performance & design meet regulation load requirements and are comparable to benchmark

	NEXIO	Kenworth T380
		
Braking system	Air disc brake system	Air disc brake system
Wheelbase	167"	202"- 208"[1)]
Chassis frame		
Front axle	**16,535 lbs**	**12,000 lbs**
Rear axle	**28,660 lbs**	**21,000 lbs**
GCW	**45,195 lbs**	**33,000 lbs**

Shorter wheelbases enable stability and maneuver-ability

Specs reported are not legally limited

1) Typical range of given spec; exact spec dependent on model year and configuration and for likely propane transportation applications

Source: NEXIO, Secondary research, Roland Berger

NEXIO has a cabin design that is stylistically modern while offering comparable features across the board to benchmark

Interior comparison- Design

Outside-in view:
NEXIO's interior design is modern and offers features comparable to benchmark

Key features	NEXIO	Kenworth T380
Seating positions	Room for 2-3	Room for 2-3
Dashboard	Digital dashboard	Digital dashboard
Climate control	Manually adjustable digital climate controls	Automatic one-touch climate control functions
Bluetooth connectivity	Yes	Yes
USB ports availability	Yes	Yes
Interior cabin air filtration syst.	Yes	No[1)]

1) Not a mentioned feature for T380

Source: NEXIO, Secondary research, Roland Berger

Due to already meeting EU GSR2 standard, NEXIO's product provides high safety (comparable to benchmark) and benefits from these features being standard

E&E comparison– Active safety feature offerings

		NEXIO standard features	Kenworth T380 stand. + optional
Active safety features	Front radar auto brake	✓	✓
	Blind spot detection	✓	✓
	Lane departure warning	✓	✓
	Integrated camera view system	✓	✓
	Driver drowsiness & attention warning	✓	✓
Other features[1)]	Adaptive cruise control	✓	✓

✓ Offered as standard feature ✓ Offered as optional feature

"Durability and safety are number one in terms of importance"
– Category Manager at major propane fleet company

"A fleet is going to go with the truck that stays on the road- A truck that's more reliable and safer"
– Vice President of Distribution at major national distributor

1) Captures non-critical active safety features

Source: NEXIO, Expert interviews, Secondary research, Roland Berger

To meet telematics requirements, NEXIO is focusing on making it easy to install/integrate leading telematic provider offerings

E&E comparison– Telematics

NEXIO

NEXIO will allow fleets and operators to use their preferred telematics providers, which are expected to have market leading features to optimize fleet performance

Examples of leading 3rd party telematics providers

verizon connect
GEOTAB
samsara

Kenworth

KENWORTH TruckTech+ Remote Diagnostics and Service Management is a fully integrated system designed to streamline fleet maintenance

KENWORTH TRUCKTECH+ Remote Diagnostics

Obtain real-time visibility throughout service process

Real-time analytics to enable informed decision making

Decision support tools to turn data into actionable intelligence

"Telematics are in every vehicle we have; it's a critical tool to utilize for key areas like predictive maintenance, as we want to enhance vehicle reliability & maximize uptime"

– Fleet Director, leading parcel delivery company

Source: NEXIO, Expert interviews, Secondary research, Roland Berger

NEXIO has partnered with reputable leaders across their respective domains in the development and homologation of this project

Key strategic partners supporting project development & delivery

	Licenses development & IP	Engine research & development	Engine durability	Engine durability	Project development & certification	Project & certification
Company name	BeGas	SwRI Southwest Research Institute	Excel Engineering	MAHLE Powertrain	AVL	Applus IDIADA
Experience	+40 years	+75 years	+20 years	+20 years	+70 years	+30
Focus industries	Automotive	years Automotive & transportation, manufacturing & construction, biomedical, materials,, others	Automotive	Automotive	Automotive, rail, marine, energy	Automotive
Key services	• Transfer of key BMC intellectual property to support engine homologation including: – Software – Technology the – Simulations – Other IP	• Engine simulation modeling • Vehicle system modeling • EAT[1] research • Calibration & dynamometer emission performance • Others	• EPA/CARB Emissions Cycle Calibration Testing Facilities • Dynamometer Testing Facilities for US OBD Software Development • Evaporative Testing Facilities • Durability Testing	• Predictive analysis • Design integration support • Procurement • Testing support of MAHLE Jet Ignition (MJI) Facilities	• MY2027 certification • MY2028 carry-over certification • Single running changes	• Homologation of vehicles for US regulatory requirements

"AVL is the **go-to** party with **powertrain development** and integration"

– **Vice President at major homologation company**

"IDIADA is **highly recommended for homologation** – They know all legal authorities, documentation, and have all the necessary equipment to operation at global scale"

– **Vice President at major homologation company**

1) Exhaust aftertreatment

Source: NEXIO, Expert interviews, Secondary research, Roland Berger

AVL is a key player in certification and homologation, with experience across a wide variety of OEMs and use cases and the necessary tools to enable success

Overview – AVL

About AVL

Established	1948
Years of experience	75
Countries represented	26
US HQ	Ann Arbor, MI
US Compliance founding	2007
Employees	11,200
Capabilities	Certification, development, SW engineering

> "We tackle the process to manage project homologation and EPA and CARB certs, among others, for manufacturers that do have the resources to do it in-house"
>
> – **Technical Lead at AVL**

Relevant experience

Established processes, tools, and techniques

Benchmarks	Customer timelines	Virtual test bed	QG process	DRIVE	CRETA	SPA
Objectification of subjective driving pleasure	Mapping of key dates & requirements	Virtual calibration in non-standard conditions	Proven process for production programs	Assessment of vehicle attributes	Calibration life cycle data mgmt. system	Transmission calibration

Deep experiences and use cases

- **+300** Engine projects
- **190** Certification projects
- **170** Homologation projects
- **50** OEM certifications

Ford Scorpion 6.7L diesel
co-development

Projects across a variety of fuel types
incl. spark-ignited fuels, HD gasoline, BEV

Projects to bring new OEMs to market
incl. a BEV start-up

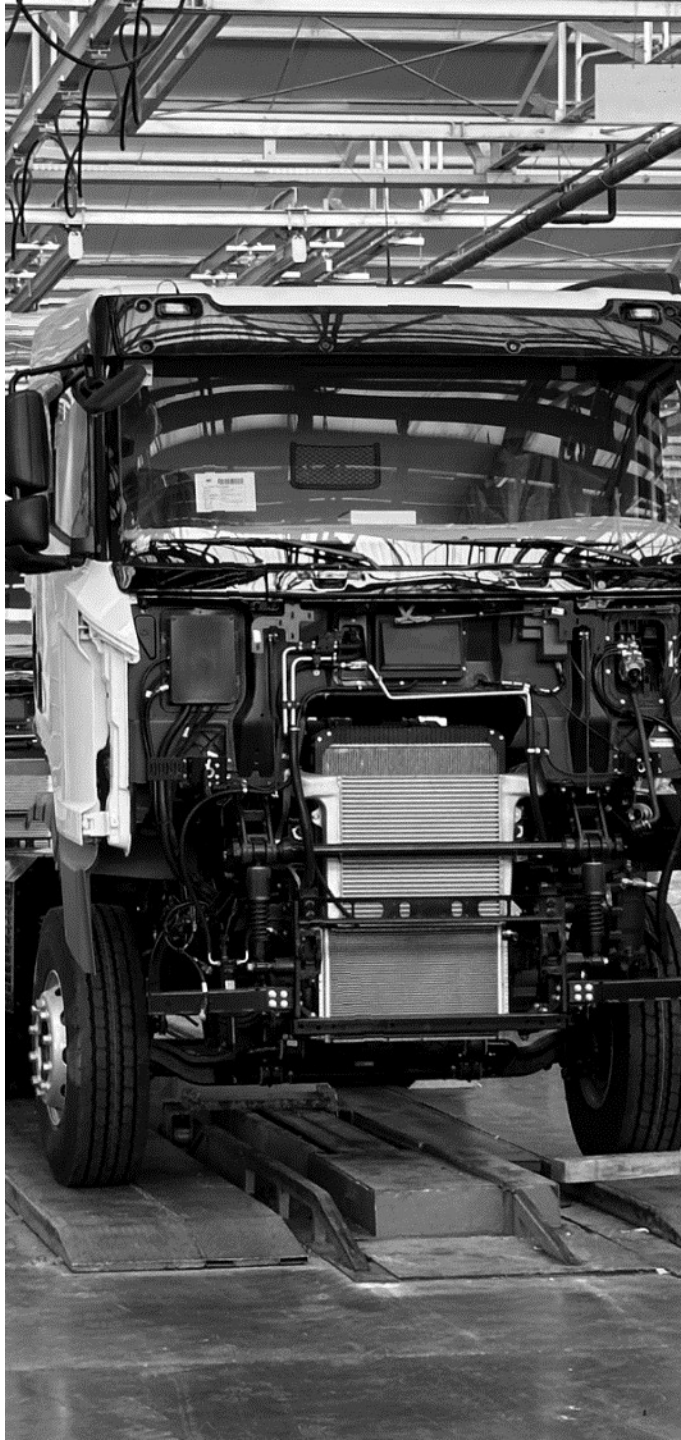
Source: NEXIO, AVL, Roland Berger

Sales and service strategy

This chapter focuses on NEXIO's sales and service strategy and key assumptions

Chapter overview

Sub-chapter	Content
1 **Sales & Service strategy**	• Overview of NEXIO's Sales & Service model • Overview NEXIO's Sales & Service strategic partners and respective offerings • High-level service model comparison versus benchmarks • Outside-in gap assessment of ability of NEXIO's planned Sales & Service model to meet target customer needs



NEXIO's Sales and Service model spans across 3 key elements

NEXIO Sales and Service model for US + CANADA

	Sales		Service
	Discover	Transact	Post-purchase
Go-to-market strategy elements	**i Marketing** • External events • Industry trials • Direct discussions • Media activities	**ii Sales model** • Direct sales to leading fleets (propane distributors and MD WIV customers) • Indirect sales to others through 3rd party networks	**iii Service model** • Leverage 3rd party service centers for service fulfillment – Train the trainer (in-house + 3rd party service networks) – NEXIO on-board diagnostics provide information on issues and root causes for faster problem solving • On-demand technicians available for remote support and in-person service
Locations		• Direct sales through NEXIO and Pritchard network (fleet relationships) • Indirect sales through Pritchard dealerships + SHAED online platform	• NEXIO will maintain a US parts warehouse • 3rd party dealer network • 3rd party mobility platform • 3rd party local technicians

Source: NEXIO, Pritchard, Roland Berger

NEXIO plans to sell directly to the propane industry, while forming partnerships with Pritchard to enhance their Sales & Service capabilities

Strategic partners in Sales & Service

Sales

NEXIO will focus on direct sales to focus customers (e.g., propane industry)- others are also able to place orders through NEXIO website …

…and **Pritchard will also leverage its existing fleet relationships** + the SHAED platform to **reach additional customers**

Service

Pritchard will leverage a service concierge model (train/support an extended 3rd party service network of existing LPG service providers [buses, etc.] or customer-preferred 3rd party service providers), …

…**benefitting from vehicle remote diagnostics** enabled by NEXIO

1) Other prospective customers will also be able to place orders through NEXIO's website

Source: NEXIO, Pritchard, Roland Berger

Pritchard has long-term experience in Sales and Service of automotive OEMs across both passenger and commercial vehicles

About Pritchard

History of Pritchard Companies

Pritchard Companies is a family owned and operated automotive enterprise

Founded	1913
Locations	Across N. America
Headquarters	Clear Lake, Iowa
Business units	8

Pritchard Commercial & CV experience

Pritchard Commercial is a B2B commercial vehicle dealer that sells across a variety of OEMs and fuel sources and provides service offerings

Founded	1949
Locations	• 12 brick and mortar dealerships • 300+ Existing Pritchard Service Facilities & Existing Network of LPG Facilities
States w /product	50
Vehicle classes	2-6
Fuel sources	Diesel, gasoline, gas/E85, electric

Over 10 OEMs offered

Services

- Chassis supply
- Telematics
- Body modification assistance
- Logistics and shipping
- Registration and warranties
- Recall maintenance
- Financing

Source: Secondary research, Pritchard, Roland Berger

SHAED provides a platform that allows customers to easily place vehicle orders and schedule service requirements (will also be integrated in NEXIO website)

About SHAED

Shared
Hydrogen
Alternative
Electric
Distribution

About SHAED

Founded	2021
Headquarters	Minneapolis, Minnesota
Commercial partners	+2,000 globally
Customer reach	Large fleets, small businesses, dealers, upfitters
Description	Alternative fuel commercial vehicle procurement platform

Commercial EVs SHAED

NEXIO will sell via SHAED's dedicated **propane platform**[1] and **provide transparency** on where vehicle is from purchase to delivery

Offerings

- Acquisition
- Upfitting
- Logistics
- Status tracking
- AI integration
- Financing

Comments

- SHAED platform is comparable to other CV procurement platforms like Holman and has all required information and features
- However, some potential headwinds need to be considered
  - Readiness and NEXIO fit: SHAED's platform is marketed strongly for EVs; Positioning for propane fuels needs to be demonstrated
  - Customer attraction: SHAED needs to build up trust among fleets to be comparable to legacy providers (e.g., Holman)

1) SHAED will build a propane-specific platform similar to its CommercialEVs.com site for electric vehicles

Source: Secondary research, Pritchard, Roland Berger

Traditional OEMs have established networks and processes to serve fleets while startups tend to leverage partnerships with established networks

Service set-up benchmarks

NEXIO ENERGY IGNITED

- **Provide in-house train the trainer model** and support **for service network** (focus on RTB[1]) customers)
  - The similarity of service of Propane engine vehicles to current Diesel vehicles will make upskilling of 3rd party service centers easier (unlike BEV & Hydrogen)
- **Develop service technicians with defined Area of responsibility (AOR)** to support key propane distribution customers
- **Leverage partnership with Pritchard** for providing additional maintenance and warranty servicing options for fleets
- **NEXIO's US Parts Warehouse will** hold inventories and **be the distribution point for replacement parts**

NIKOLA™

- **Provide certification and procedures to clients** who have their own maintenance infrastructure
- **Developing a network of trained technicians** to travel to a customer or service partner
- **Leverage partnerships** with existing dealer networks for maintenance and warranty
- **Nikola will procure replacement parts**, distributed by third parties

Alternative powertrain Commercial Vehicle OEM Start-up

DAIMLER TRUCK North America FREIGHTLINER®

- **Freightliner has a significant network** of authorized Detroit® service technician locations
- Partnered with **TravelCenters of America and Petro Stopping Centers offering 24/7 express service** and Light Duty repairs
- Service locations store and sell replacement parts and components

Traditional Commercial Vehicle OEM

1) Return-to-base

Source: NEXIO, Secondary research, Roland Berger

NEXIO's proposed Service model of a mix of in-house and 3rd party servicing is not new and has the required elements to meet customer expectations

Service model comparison

Servicing option		NEXIO	NIKOLA	DAIMLER TRUCK North America / FREIGHTLINER	Service focus (selection)
Service centers & body shops	Own brand				• Warranty repairs • Tire rotation/wheel alignment • Engine maintenance and repairs • Body repair
	3rd party	Focus on partner centers	Focus on partner centers with established service structure	Dual approach	
Mobile service	Own brand				• Maintenance and inspection • Emergency services and minor repairs • Minor parts replacement
	3rd party	Mix of in-house technicians & service points + Pritchard- 3rd party	Focus on partner servicing	Dual approach	
Emergency roadside assistance	Own brand				• Flat tire and towing • Replacement/loaner vehicle • Recovery to nearest service center
	3rd party	Focus on partner roadside assistance	Focus on partner roadside assistance	Focus on own and partner roadside assistance	

■ Large offering ▨ Partial offering □ No offering

Outside in view

NEXIO's planned service model seems capable of meeting fleet requirements especially due to the similarity of service of Propane engine vehicles to current Diesel vehicles, which will make 3rd party servicing easier- **Ability to execute to customer expectations will be what defines NEXIO's overall success**

Source: NEXIO, Pritchard, Secondary research, Roland Berger

Pritchard has necessary S&S elements to support NEXIO's plan- Key is having right 3rd party brick & mortar service centers and ensuring timely issue resolution

Pritchard capabilities and alignment with NEXIO requirements

Experience alignment

Sells limited alt. powertrain today

Sells gas/E85, diesel and electric vehicles today

Limited alt. powertrain experience

Sells COE in MD vehicles today

2024 Chevrolet LCF 5500XD
Gas & diesel, class 6

2024 REE P7-C
EV, class 4

Transferrable MD COE experience

Geographic alignment

Sales & service network

- **12 brick and mortar dealership** locations
- **300+ existing Pritchard service facilities and existing network of LPG facilities with additional 1200+** 3rd party brick & mortar service locations identified to support NEXIO

Remote service performance (2024 YTD)

- Remote service provided at 49 locations
- 1800 repair orders for offsite service work by Pritchard technicians

Service philosophy

- When a service need emerges- customers reach out to Pritchard + NEXIO service team
- NEXIO identifies issues based on remote diagnostics
- Pritchard reaches out to pre-identified 3rd party partner[1] or identifies who can service based on customer location
- Pritchard provides required remote information or flies in service technician as required[2]

In case of emergency road assistance, same model will be followed, and **pre-identified high-priority 3rd party service centers will be leveraged**

Outside in view

While Pritchard has transferrable experience, NEXIO needs to ensure that Pritchard is ready to promote and service NEXIO products to meet customer requirements and engage with the right 3rd party brick and mortar service centers (especially first anchor partners)

1) At the time of NEXIO sale, NEXIO discusses with customer who their preferred 3rd party service providers are and incorporates them into their service network; 2) Based on Pritchard's EV deployment experience, 30%of service problems can be independently solved by 3rd party provider, 35%need remote guidance by Pritchard technician/team, and 35%need in-person service support of Pritchard technician/team

Source: NEXIO, Expert interview, Secondary research, Roland Berger

NEXIO's proposed Sales & Service model appears able to meet the needs of customer fleets

NEXIO's ability to meet fleet Sales and Service needs

	What do fleets need?		How is NEXIO prepared to meet these needs?
Sales	**Dedicated point of contact**	"The first thing when looking at a new product is to show me why it's a better fit than the thing I had today. We would need see results to understand why [we should change]" – Former Senior Fleet Maintenance Manager at major national fleet	✓ Hire expert sales personnel that intimately understand the propane distribution industry and dynamics
	Availability and ease of access of information to compare to alternatives[1]		✓ NEXIO will provide required info for easy product comparison (TCO calculator ,etc.) and leverage SHAED platform for easy communication + NEXIO should integrate early product feedback into information provided
	Testimonials and proof of reliability		✓ BeGas-NEXIO V8 engine in Europe is evidence of past reliability- Further education of US customers needed
Service	**Internal workforce training**	"Part of the decision criteria before buying 100 assets is clearly whether you can train my employees" - Director of Supply Chain at major national fleet	✓ Implement a train the trainer model to upskill its service partners and key customers on servicing its products
	Preferred third party training		✓ NEXIO will work with preferred 3rd party service providers of each fleet and certify them to allow fleets to continue using them
	Rapid resolution of issues		⊕ Should identify anchor 3rd party brick and mortar service centers in key areas and build out network further as sales expands
	Reliable and cost-effective access for spares	"The expectation is that within 2 days you can get 75%of parts on the BOM" – VP, Major national distributor	✓ Maintain a US parts warehouse that will keep inventories to enable quick dispatch to meet customer requirements

✓ Addresses need ⊕ Opportunity to clarify or mature

1) Informational package that clearly articulates the TCO advantages and technical specs of NEXIO's products

Source: NEXIO, Pritchard, Expert interviews, Roland Berger

Geopolitical context

The November 5th US elections resulted in a major victory for the Republican Party (GOP)

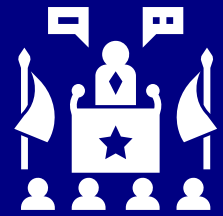
Donald Trump won the presidency in an electoral landslide, securing approximately 312 electoral votes compared to 226 for Kamala Harris

The Republican Party (GOP) took control of the Senate by a slim margin, with 53 seats versus 47 for the Democrats

The GOP surprised many by **retaining control of the House of Representatives** with a narrow majority of 220 to 215 seats over the Democrats

While Trump is elected to office with a mandate across cultural economic and political positions **it does not mean that passing major policy reform will not be without challenges**

Recent ruling against the "Chevron Doctrine" at the Supreme Court will also **stifle unilateral Executive ability to set tariffs and policies** (through Federal Agencies)



Source: Secondary research, Roland Berger

The impact of the new Trump administration on policy should be understood across 3 main phases

I Transition Period

Today to inauguration (Jan 20th,2025)

Focus Activities

- Cabinet nominations
- Translating campaign promises into policies
- Building internal party coalition and support
- Prioritizing policy priorities for first 100 days

II First 100 Days

100 Days

Focus activities

- Secure congressional support to smoothen passage of priority policies
- Solidifying electoral base by delivering fast-wins
- Transitioning staff to take over

III Post 100 days to 2026 mid-term elections

To 2026 mid-term elections

Focus activities

- Implement longer-term signature legislation such as immigration reform or trade policy and legislation
- Cost-cutting and government reform
- Geo-political repositioning
- Institutional reform (domestic and international)

Source: Secondary research, Roland Berger

Dynamics during current Transition Period shaping first 100 Days

Nomination of cabinet appointments of Trump loyalists and those who are unlikely to question Trump policy positions (looking for executors, not sparring partners)
- Testing "room to maneuver" with Republican base through Cabinet nominations

Building base of evidence and scenarios to defend how to pay for forthcoming tax cuts
- Engagement of think tanks, advocacy groups and special task forces/committees underway to build justification for forthcoming policies and tax positions

Mixed rhetoric between Trump the idealogue v. Trump the deal-maker
- Unclear whether campaign promises will be treated case-by-case (deal-making) or stitched together as a coherent policy platform

Repeated promise to reverse culture of DEI and "woke" policies
- Wholesale rejection of overt "woke" policies such as Justice40
- Many other policies likely to be rebranded under umbrella of national security, industrial policy and localization (i.e., many energy transition activities, subsidies and requirements)

Source: Secondary research, Roland Berger

Primary policy priorities of the first 100 days impacting the Auto industry

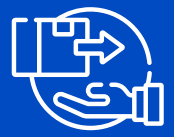
1. **Extension of 2017 tax cuts through reconciliation (likely by end Q2 '25) opens a window to possibly address targeted subsidies and tariffs**
   - Potential threat to various existing subsidies (e.g., Section 30d- Clean vehicle credit); potential introduction of new tariffs impacting industry
2. Use of Section 232 of Trade and Expansion of 1932 (Dept of Commerce to determine if of national security), section 301 of Trade Act of 1974 (USTR) and International Emergency Economic Powers Act **to implement tariffs to incentivize border security actions**
3. **Lift ban on LNG exports**
   - Immediate action to stabilize LNG market and drive down the cost of gasoline in US
4. **Relaxing of environmental emissions regulations**
   - Efforts to weaken federal standards like EPA 2027- however long-term nature of these regulations (compliant actions already underway by major OEMs [significant investments completed] and presence of state regulations (like CARB) will complicate overall position and might result in weakening of incentives/ enforcement while overall structure might remain (different pathways could be established for different vehicle categories- e.g., different pathways for Light Vehicle and Medium & Heavy Duty vehicles)
5. **Illegal immigration response**
   - Threat of increase in tariffs against Mexico (25%) and Canada (25%) unless Governments agree to cooperate to secure borders and potential future ramifications on USMCA review that could impact automotive supply chains for vehicles sold in US
6. **Relaxing of anti-trust rules and enforcement at Federal Trade Commission (FTC) and SEC could lead to more M&A activities in Auto segment**

Source: Secondary research, Roland Berger

Depending on the actions of the Trump administration and resulting global response, NEXIO can see demand side and supply side impacts

Key questions

A Demand-side questions



- How will customers change their purchases preferences if key regulations or incentives change ?

B Supply-side questions

- Will additional tariffs be imposed on non-US production regions- especially for Turkey ?
- Will tariffs consider the nationality of the company?

Information shown below is RB's current view (01.06.2025)- View subject to change as federal and state regulations announced

Geopolitical developments impacting demand side expected to be mostly favorable for NEXIO's business case

Geopolitical actions (1/2)

#	Potential geopolitical development	Impact on NEXIO · Sales volume	Impact on NEXIO · Margins	Comments (including mitigating actions)
A1	**Vehicle emission regulations weakened (e.g., EPA GHG Phase 3)**	↑	n/a	**Positive for NEXIO** as lower fleet emission targets will allow fleets to be more likely to be able to use propane offerings to support their decarbonization efforts (without the need for electrification)
A2	**Federal BEV rebates/tax credits are reduced or removed**	↑	n/a	**Positive for NEXIO** as without BEV rebates/tax credits, NEXIO's propane vehicle TCO advantage[1] against BEV increases further (e.g., MD WIV Class 6 propane vehicle advantage against BEV increases from USD 77k over 10 years to ~USD 117k if clean vehicle tax credit removed)
A3	**Alternative fuel tax credit (AFTC) not extended beyond current end date of December 31, 2024**	→	n/a	**Neutral for NEXIO** as overall propane fuel costs **expected to not change since the cost increase due to removal of this credit will likely be offset by reduction in propane price resulting from higher domestic propane production** (due to focus on increasing domestic oil refining and natural gas processing- one of the priorities of 2nd Trump administration) **NEXIO can further mitigate this risk** by participating in ongoing government engagement by industry organizations (e.g., NPGA- National Propane Gas Association) to extend the validity of AFTC

↑ Significantly improves ↗ Slightly improves → No impact ↘ Slightly decreases ↓ Significantly decreases

1) For high emission reduction trajectories, fleets could still be forced to choose BEVs (due to extent of emission reduction per vehicle compared to propane vehicles)

Source: Secondary research, Roland Berger

Information shown below is RB's current view (01.06.2025)- View subject to change as federal and state regulations announced

If emission regulations impacting fleets are weakened, NEXIO will benefit as propane vehicles can help fleets reduce emission (without need for BEVs)

What can potentially change

- **Vehicle emission regulations weakened** (both supply and demand side like EPA GHG Ph. 3 and CARB ACF respectively) either in terms of emission trajectory, penalties for non-compliance or enforcement **which would reduce emission reduction trajectory for fleets**
  - e.g., **CARB ACF currently mandates fleets operating in California to reduce their emissions** through either having only ZEVs added from 2024 onwards or orient toward 100% ZEV fleet by 2035-2042 **but it needs an EPA waiver to come into law and this might be withheld under 2nd Trump administration** (likely leading to lengthy legal tussles)

- However, **major fleets still expected to keep internal emission reduction objectives but could potentially slow their reduction curve**
  - e.g., KNIGHT TRANSPORTATION, SWIFT TRANSPORTATION, PEPSICO
    - 50% CO_2 emissions per mile reduction by 2035
    - 75% scope 1 & 2 emissions reduction by 2035[2)]

- In such a case, **fleets would have higher propensity to try lower cost emission reduction alternatives like Propane over** high-emission reduction but higher cost options like **BEVs**

What is impact on NEXIO

Positive for NEXIO as lower fleet emission targets will allow fleets to be more likely to be able to use propane offerings to support their decarbonization efforts (without the need for electrification)

What can NEXIO do to reduce impact

- No mitigating action needed

Source: Secondary research, Roland Berger

Information shown below is RB's current view (01.06.2025)- View subject to change as federal and state regulations announced

If current federal BEV rebates/ tax credits are reduced or removed, then NEXIO vehicles will benefit as their TCO advantage over ZEVs will increases further

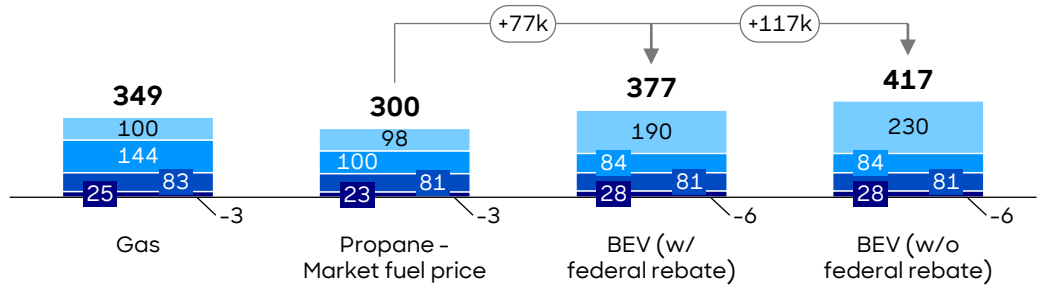
What can potentially change

- **Federal BEV rebates/ tax credits are reduced or removed which increase cost of these vehicles for fleet buyers**
  - Currently under clean vehicle tax credit, fleets can qualify for a credit of 30% for vehicles Class 3-8 (max of USD 40k) if BEVs or fuel cell electric vehicles (FCEVs) purchased
  - For certain segments, additional rebates are available that further reduce cost of BEVs and FCEVs
    - e.g., for school bus 75% of new vehicle cost will be funded by federal government if application approved (Clean Heavy-Duty vehicles grant program- total funding of USD 932 million)

What is impact on NEXIO

- **Positive for NEXIO** as without these ZEV subsidies, TCO advantage of NEXIO's propane vehicle against ZEVs increases further (e.g., NEXIO MD WIV Class 6 propane vehicle advantage against BEV increases from USD 77k over 10 years to ~USD 117k)

Total Cost of Ownership(TCO) for MD Class 6 WIV, 2024



What can NEXIO do to reduce impact

- No mitigating action needed

Upfront cost | Fuel related costs | Maintenance | Insurance | EOL value

Source: Secondary research, Roland Berger

Information shown below is RB's current view (01.06.2025)- View subject to change as federal and state regulations announced

While the Alternative fuel tax credit is at risk of expiry by Dec 31, 2024- its potential impact is minimal as overall propane cost expected to come down

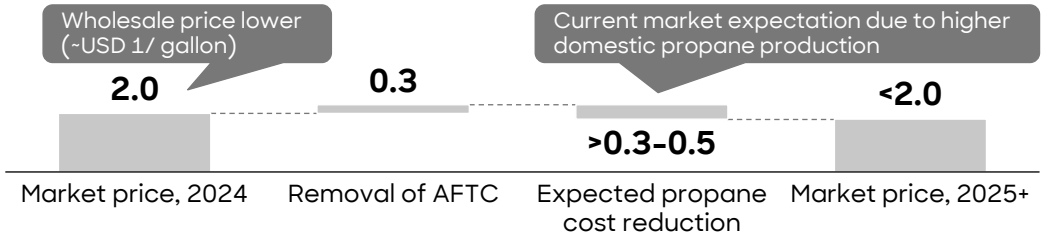
What can potentially change

- **Alternative fuel tax credit (AFTC) not extended beyond current end date of December 31, 2024**
  - The Alternative fuel tax credit currently gives tax credits for sale of alternative fuels like propane for use in motor vehicles (currently provides a USD 0.3/ gallon credit for propane used in motor vehicles)
  - This currently gives fleet owners benefits from using propane powered vehicles in their fleet however current act expires on December 31, 2024
  - **Industry associations like NPGA[1] have petitioned the federal government** to extend the validity[2] of the program, and a final decision has not yet been taken
- However, **this cost increase likely to be offset by expected decrease in propane cost due to expected higher oil production**
  - **Current Trump administration expected to increase domestic oil production which will further decrease propane costs** (since it is byproduct of oil production)

What is impact on NEXIO

- **Neutral for NEXIO** as **overall propane fuel costs expected to not change significantly** since the **cost increase due to removal of this credit will likely be offset by reduction in propane price** (resulting from higher domestic propane production due to focus on increasing domestic oil refining and natural gas processing- one of the priorities of 2nd Trump administration)

Potential evolution of propane price (USD/ gallon)



What can NEXIO do to reduce impact

- **NEXIO can further mitigate this risk by participating in ongoing govt. engagement** by industry organizations (e.g., National Propane Gas Association) to extend the validity of AFTC

1) National Propane Gas Association; 2) NPGA (National Propane Gas Association) has made a formal request to federal government for an extension of atleast 2 years for program if not longer

Source: Expert interviews, Secondary research, Roland Berger

Information shown below is RB's current view (01.06.2025)- View subject to change as federal and state regulations announced

NEXIO's US vehicle margins could be impacted by tariffs on Turkish origin components however risk of tariffs seem to be low

What can potentially change

- **Additional duties imposed on Turkey manufactured products coming into USA**
  - For its US vehicles, NEXIO will be importing the chassis and cabin from BMC's Turkey plants to its Texas vehicle manufacturing plant where NEXIO's domestic engine will be integrated and final vehicle produced (including tank for offering complete bobtails)
- **Specific tariffs by US on Turkey are currently expected to be less likely** as it is not one of the priority countries for the 2nd Trump administration and likely to be impacted only if broad range tariffs that apply to all countries are implemented (e.g., 10% tariffs on all products imported into USA)
- **Additionally, Turkey has addressed/ begun to address some of the concerns that were present during first Trump administration** (procurement of Russian weaponry, jailing of US citizens, Syrian conflict, etc.)

What is impact on NEXIO

- **Can reduce margins for NEXIO** if US increase tariffs on goods imported from Turkey- **however Turkey seems to be at lower risk of tariff action**s and **even if tariffs implemented unlikely to be >10% and only ~45% of BOM cost impacted** (for NEXIO US vehicles- remaining BOM components have US origin)

What can NEXIO do to reduce impact

- **Depending on nature of Tariffs, NEXIO might have option to mitigate this impact by registering goods from alternative locations like Azerbaijan**, etc.

Source: Secondary research, Roland Berger

Turkey has been a regular trade partner for the US and has integrated into international organizations

US-Turkey trade relations overview

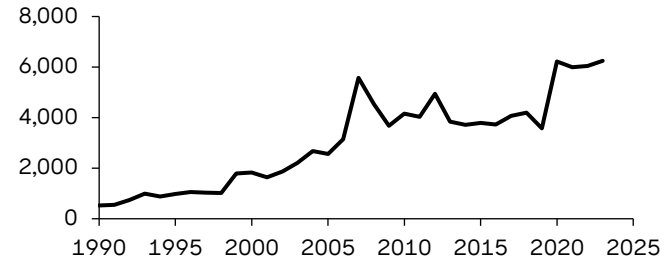
Shared membership in key international organizations

- United Nations
- World Bank
- International Monetary Fund
- NATO
- World Trade Organization

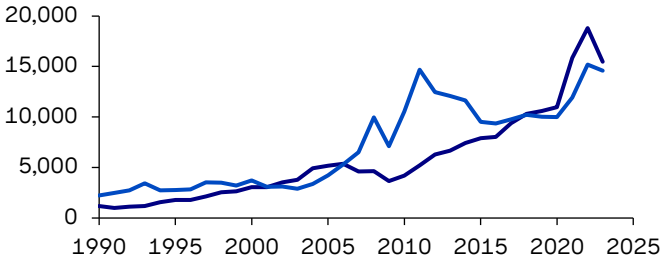
Turkey is an important **security partner** for the US

Stable US-Turkey economic engagement

US direct investment position in Turkey on a historical cost basis[1] [USD M]



US exports/imports with Turkey on a nominal basis[2] [USD M]



Imports Exports

Subject to standard tariffs

US imports of Turkish goods

US import tariffs of Turkish goods are at a weighted Most Favored Nation average of a **~3.30%** tariff[3]

Turkish imports of US goods

Turkish import tariffs of US goods are at a weighted Most Favored Nation average of a **~3.89%** tariff[3]

Comments

- The US and Turkey desire to strengthen their economic relationship[4]
- Though low likelihood, risks to potentially change current US-Turkey tariffs/trade relationships include:
  - Geopolitical tensions and domestic conflicts
  - Inadequate intellectual property regime & impacts of transport of counterfeit goods

1) Bureau of Economic Analysis data; 2) US Census Bureau data; 3) World Bank's World Integrated Trade Solution 2022 data; 4) Affirmed in 2024 TIFA Joint Council Meeting

Source: Bureau of Economic Analysis, US Census Bureau, World Bank, US Department of Commerce, Secondary research, Roland Berger

Turkey and Europe expected to be a low priority for US tarriff actions and if implemented, tariff not expected to be >10%

Expected developments in trade barriers and tariffs by country/region

	China	Mexico	Southeast Asia	Relevant for NEXIO for its US sales: Turkey	India	Relevant for NEXIO for its Europe sales: Europe
Current threat to US market	• Seen to be leveraging governmenent subsidies to unfairly lower product cost • Accused of relabeling and repackaging products in third-party countries to avoid US tarrifs	• Seen to be opening door to Chinese OEMs to sell & manufacture in the country to avoid US tarrifs (under USMCA agreement) • Not matching US & Canadian tariffs towards Chinese EVs • Additional pressures due to immigration	• Facilitating relabeling of Chinese products which are then sent to US (esp. Vietnam and Thailand) • Opening doors to Chinese OEMs and suppliers to expand manufacturing footprint	• Opening doors to Chinese OEMs and suppliers to expand manufacturing footprint and facilitate sales in Europe • Imposing 40% tariffs on Chinese EV imports	• Not perceived as immediate threat but could be impacted by level of tarrifs on existing US manufactured auto. • Potential risk arises from BRICs membership and percieved non-US actions (e.g., de-dollarization)	• Not perceived as immediate threat due to limited collaboration with China and absence of government subsidies for auto. exports • Potential risks are percieved imbalance in trade, incremental tarrif on auto and lower defense spending
Expected actions from US government	• Potential shift from country of mfg.- based tarrifs to ownership-based tariffs • Incremental tarrifs	• Increased scrutiny on origin of components • Incremental tarrifs	• Increased scrutiny on origin of components • Incremental tarrifs	• No targeted tarrifs expected and any tarrifs likely to be related to broad range tarrifs (applied to all countries) • Incremental tarrifs	• No targeted tarrifs expected and any tarrifs likely to be related to broad range tarrifs (applied to all countries) • Incremental tarrifs	• No targeted tarrifs expected and any tarrifs likely to be related to broad range tarrifs (applied to all countries) • Incremental tarrifs
	0% 10% 20% 30% 40% 50%	0% 10% 20% 30% 40% 50%	0% 10% 20% 30% 40% 50%	0% 10% 20% 30% 40% 50%	0% 10% 20% 30% 40% 50%	0% 10% 20% 30% 40% 50%
Priority for US government						

High priority for US govt. tariffs | Medium priority | Low priority

Source: Expert interviews, Secondary research, Roland Berger

Information shown below is RB's current view (01.06.2025)- View subject to change as federal and state regulations announced

NEXIO's Europe vehicle margins could be impacted by tariffs on US origin components however risk of tariffs seem to be low

What can potentially change

- **Additional duties imposed on US manufactured products coming into Europe in retaliation to US tariffs on Europe origin goods**
  - For its Europe vehicles, NEXIO will be exporting its engine (produced in Texas facility) to BMC's Turkey plants where it will be integrated with BMC produced chassis and cabin to create final assembled vehicles for sales to European market
- **Specific tariffs by Europe on US are unlikely unless US first increases tariffs which is seen as less likely** as Europe is not one of the priority regions for the 2nd Trump administration and likely to be impacted only if broad range tariffs that apply to all countries are implemented (e.g., 10% tariffs on all products imported into USA)
- **Additionally, Europe has already indicated willingness to address some of the existing concerns** (e.g., trade imbalance by higher procurement of LNG, weaponry, etc.)

What is impact on NEXIO

Can reduce margins for NEXIO if Europe increases tariffs on goods imported from US (likely in retaliation of any tariff measures imposed on European imports to US)- **however Europe seems to be at lower risk of tariff actions and even if tariffs implemented, unlikely to be >10% and only 30% of NEXIO BOM cost impacted** (for NEXIO Europe vehicles- remaining BOM components have non-US origin)

What can NEXIO do to reduce impact

- **NEXIO can potentially mitigate this impact by leveraging its small business nature** as historically European tariff measures have often had exclusions for small business manufacturers

Source: Secondary research, Roland Berger

 Information shown below is RB's current view (01.06.2025)- View subject to change as federal and state regulations announced

NEXIO is protected from any Turkish currency devaluation risks through the terms of its BMC procurement contract- payments are in USD (pegged to EUR[1])

What can potentially change

- **Turkish currency devaluation leads to uncertainty in costs of imports into/exports from Turkey and financial currency risks for Turkish firm**
  - Turkish currency has devalued significantly over last 8 years (reduced from 1 Turkish lira = 0.33 USD in 2016 to 0.03 USD in 2024)
- To improve its currency position, Turkey has introduced measures to cap domestic demand and boost exports and targeting a reduction of inflation of 44% in 2024 to 12% by 2026

What is impact on NEXIO

- **Neutral for NEXIO** as this **potential risk already mitigated through NEXIO's procurement contract with BMC**
  - NEXIO **payment to BMC in USD** (pegged to EUR with defined USD-EUR rate boundaries- mutual discussion to renegotiate FX conversions in case of changes beyond these boundaries)
- **Additionally, BMC also has limited exposure to Turkish currency devaluation as its supply contract with other customers are in EUR and it is also actively hedging its currency exposure**

What can NEXIO do to reduce impact

- **Impact already mitigated by NEXIO**

1) USD pegged to EUR with defined USD-EUR rate boundaries

Source: Secondary research, Roland Berger