

From Plans to Progress: The State of the Presidential CNG Initiative in Nigeria

by the

NESG Community of Practice on Youths



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Executive Summary

Nigeria's Presidential Compressed Natural Gas Initiative (Pi-CNG), launched in response to pressing economic and environmental imperatives, represents a cornerstone of the nation's strategy to diversify its energy mix, alleviate economic hardship following fuel subsidy removal, and transition towards a more sustainable energy future. As part of the country's overall decarbonisation agenda, as detailed in the NDC3.0 and the updated Nigerian Energy Transition Plan, this report provides an in-depth analysis of the Pi-CNG, detailing its scope, objectives, and progress in terms of investment, infrastructure deployment, vehicle conversion, and human capital development.

Since its operational commencement, the Pi-CNG has attracted significant investment, exceeding \$US500 million, primarily from the private sector, complemented by public funds such as the Midstream and Downstream Gas Infrastructure Fund (MDGIF).¹ This has fueled a rapid expansion in CNG infrastructure, with the number of vehicle conversion centres growing from a mere seven to over 250 refuelling stations, increasing from a baseline of around eleven to over 53 operational daughter stations, with more than 175 additional stations planned or under development.² Vehicle conversions have surpassed 50,000, with projections to soon reach 100,000, including commercial vehicles, tricycles, and buses procured for mass transit and specific government programmes.³ Thousands of technicians and personnel have reportedly been trained to support this burgeoning sector.⁴

Despite these achievements, the initiative faces substantial challenges. The rollout of refuelling infrastructure, while rapid, still lags demand, leading to queues and operational bottlenecks, especially outside major urban centres. There are significant concerns regarding the equitable distribution of both refuelling stations and conversion centres across Nigeria's geopolitical zones, with the North-East and North-West reported as notably underserved.⁵ The high upfront cost of vehicle conversion remains a significant barrier to widespread adoption by individual vehicle owners and small transport operators, despite available subsidies.⁶ Issues of gas supply consistency, public awareness, safety standards, and policy predictability also require concerted attention.

¹50000 vehicles converted as CNG investments hit \$500m - Punch Newspapers, accessed June 11, 2025, <https://punchng.com/50000-vehicles-converted-as-cng-investments-hit-500m/>

²ibid

³ibid

⁴MEMAN: Over 250 Centers, \$500 Investment - Nigeria's CNG Push Gains Momentum, accessed June 3, 2025, <https://environmentafricamag.com/2025/05/23/meman-over-250-centers-500-investment-nigerias-cng-push-gains-momentum/>

⁵Reps caucus decries lack of CNG conversion centres in north - The Nation Newspaper, accessed June 8, 2025, <https://thenationonlineeng.net/reps-caucus-decries-lack-of-cng-conversion-centres-in-north/>

⁶Compressed Natural Gas Adoption in Nigeria: Benefits and Barriers - LightRay! Media, accessed June 8, 2025, <https://lightraymedia.org/2024/10/25/compressed-natural-gas-adoption-in-nigeria-benefits-and-barriers>

This report carefully analyses these successes and shortcomings, drawing on available data and stakeholder perspectives. It proposes a suite of strategic policy recommendations aimed at enhancing the Pi-CNG's effectiveness. These include prioritising equitable infrastructure development, improving the affordability and accessibility of conversions through enhanced financial mechanisms, strengthening regulatory frameworks and safety protocols (notably through the full operationalisation of the Nigerian Gas Vehicle Monitoring System - NGVMS), deepening public engagement and transparency, ensuring long-term policy stability, and actively fostering local content in the CNG value chain. The successful navigation of these challenges and the diligent implementation of robust policies will be crucial for Nigeria to fully realise the transformative potential of the Pi-CNG.



The Presidential CNG Initiative: Genesis, Objectives, and National Imperative

A. Context: Nigeria's Energy Transition and Economic Pressures

Nigeria has long grappled with an overdependence on petroleum products, especially petrol and diesel, for its transportation and energy needs. This reliance has exposed the economy to the volatility of global oil prices, imposed a substantial burden through fuel subsidies, and contributed significantly to foreign exchange outflows.⁷ Environmentally, the widespread combustion of these fossil fuels has led to increased greenhouse gas (GHG) emissions and deteriorating air quality in urban centres.⁸

The removal of petrol subsidies in mid-2023 marked a crucial moment intended to correct fiscal imbalances but concurrently triggering an escalation in transportation costs and broader inflationary pressures across the economy.⁹ This created an urgent socio-economic imperative for affordable and domestically sourced energy alternatives. Against this backdrop, Compressed Natural Gas (CNG) emerged as a strategically vital option. Nigeria possesses vast natural gas reserves, estimated at over 210 trillion cubic feet¹⁰, presenting a significant opportunity to leverage this indigenous resource. CNG is positioned as a "bridge technology" – a cleaner and more cost-effective alternative to conventional liquid fuels that can facilitate a smoother transition towards a more sustainable energy future while addressing immediate economic concerns.¹¹ President Bola Ahmed Tinubu highlighted the potential for CNG to reduce transportation costs by approximately 60 percent and help curb inflation, underscoring its economic significance.¹²

The Presidential CNG Initiative (Pi-CNG) is thus not merely an energy diversification project but a comprehensive policy response to a confluence of factors. It represents a strategic intervention designed to mitigate the adverse economic impacts of fuel subsidy removal, manage inflationary pressures stemming from high energy costs, stimulate job creation, and advance the nation's commitments to environmental sustainability and climate change mitigation. The timing of the Pi-CNG's formal launch in August 2023¹³, with operational activities and awareness campaigns intensifying thereafter¹⁴, directly aligns with the post-subsidy economic landscape.

⁷Harnessing Nigeria's Compressed Natural Gas (CNG) Potential for Sustainable Energy and Economic Transformation, accessed June 8, 2025, <https://ng.andersen.com/harnessing-nigerias-compressed-natural-gas-cng-potential-for-sustainable-energy-and-economic-transformation/>

⁸ibid

⁹ Nigeria: Tinubu's CNG Initiative Faces Growing Backlash Over Poor Infrastructure, accessed June 4, 2025, <https://westafricaweekly.com/nigeria-tinubu-cng-initiative-faces-growing-backlash-over-poor-infrastructure/>

¹⁰Nigeria Unleashed: CNG and the Business of Clean Energy - Forbes Africa, accessed June 6, 2025, <https://www.forbesafrica.com/africa-undiscovered/2025/06/11/nigeria-unleashed-cng-and-the-business-of-clean-energy-2/>

¹¹ ibid

¹²ibid

¹³Nigeria: Tinubu's CNG Initiative Faces Growing Backlash Over Poor Infrastructure, accessed June 4, 2025, <https://westafricaweekly.com/nigeria-tinubu-cng-initiative-faces-growing-backlash-over-poor-infrastructure/>

¹⁴50000 vehicles converted as CNG investments hit \$500m - Punch Newspapers, accessed June 11, 2025, <https://punchng.com/50000-vehicles-converted-as-cng-investments-hit-500m/>

The initiative's success is therefore intrinsically linked to its ability to deliver tangible benefits in terms of reduced cost of living, enhanced employment opportunities, and a cleaner environment for Nigerians.

B. Launch, Scope, and Strategic Goals of the Pi-CNG

The Presidential Compressed Natural Gas Initiative (Pi-CNG) was officially launched on August 18, 2023¹⁵, although its operational rollout and intensive awareness campaigns commenced around May 2024 and continued through October 2024.¹⁶ The initiative is a flagship programme of President Bola Ahmed Tinubu's administration, operating under the "Renewed Hope Agenda".¹⁷

The scope of the Pi-CNG is extensive, encompassing the entire CNG value chain. This includes incentivising the conversion of petrol and diesel vehicles to run on CNG, facilitating the procurement and deployment of new CNG-powered vehicles (buses and tricycles), stimulating investment in critical gas infrastructure (refuelling stations, conversion centres, and gas processing facilities), coordinating regulatory frameworks, and promoting skills development and public awareness.¹⁸

The strategic goals of the Pi-CNG are multi-dimensional:

1. **Economic Relief:** To significantly reduce transportation costs for citizens and businesses, thereby alleviating the financial burden caused by high petrol prices.¹⁹
2. **Environmental Sustainability:** To promote a cleaner energy alternative that reduces vehicular emissions of greenhouse gases and other pollutants, contributing to improved air quality and aligning with Nigeria's commitment to reducing greenhouse gas emissions toward achieving net-zero emissions by 2060²⁰
3. **Job Creation and Empowerment:** To generate employment opportunities across the CNG value chain, including manufacturing, conversion, maintenance, and distribution, with a particular focus on youth empowerment.²¹
4. **Energy Security and Resource Utilisation:** To enhance Nigeria's energy security by promoting the use of its abundant domestic natural gas reserves, thereby reducing reliance on imported petroleum products and conserving foreign exchange.²²

¹⁵Nigeria: Tinubu's CNG Initiative Faces Growing Backlash Over Poor Infrastructure, accessed June 4, 2025, <https://westafricaweekly.com/nigeria-tinubu-cng-initiative-faces-growing-backlash-over-poor-infrastructure/>

¹⁶50000 vehicles converted as CNG investments hit \$500m - Punch Newspapers, accessed June 11, 2025, <https://punchng.com/50000-vehicles-converted-as-cng-investments-hit-500m/>

¹⁷Federal Government of Nigeria Presidential CNG Initiative (Pi-CNG) 2025 | How To Apply, accessed June 7, 2025, <https://www.scholarshipregion.com/presidential-cng-initiative/>

¹⁸50000 vehicles converted as CNG investments hit \$500m - Punch Newspapers, accessed June 11, 2025, <https://punchng.com/50000-vehicles-converted-as-cng-investments-hit-500m/>

¹⁹Nigeria Unleashed: CNG and the Business of Clean Energy - Forbes Africa, accessed June 6, 2025, <https://www.forbesafrica.com/africa-undiscovered/2025/06/11/nigeria-unleashed-cng-and-the-business-of-clean-energy-2/>

²⁰ Nigeria's Third Nationally Determined Contributions (NDC 3.0), accessed November 6, 2025, <https://unfccc.int/sites/default/files/2025-09/Nigeria%20NDC%203.0%20-%20Transmission%20Version%202.pdf>

²¹50000 vehicles converted as CNG investments hit \$500m - Punch Newspapers, accessed June 11, 2025, <https://punchng.com/50000-vehicles-converted-as-cng-investments-hit-500m/>

²²Nigeria Unleashed: CNG and the Business of Clean Energy - Forbes Africa, accessed June 8, 2025, <https://www.forbesafrica.com/africa-undiscovered/2025/06/09/nigeria-unleashed-cng-and-the-business-of-clean-energy/>

5. Industrial Development: To provide affordable gas for industrial processes and power generation, supporting sectors like petrochemicals, fertilisers, and manufacturing.²³

Ambitious targets have been set for the initiative, most notably the goal to convert one million vehicles to CNG by 2027.²⁴ Initial reports also mentioned a target of establishing 40,000 conversion centers²⁵, a figure that appears significantly higher than more recent, pragmatic targets like the establishment of 1,000 centres.²⁶

The government's role is primarily that of a facilitator, incentivizer, and coordinator, aiming to drive a private-sector-led rollout of CNG infrastructure and adoption. Key fiscal incentives introduced include tax breaks, import duty waivers on CNG equipment, and access to low-interest loans for businesses and consumers to encourage investment and uptake.²⁷

The Pi-CNG's success is fundamentally dependent on sustained private sector investment. The government's explicit positioning of the initiative as "private-sector-led"²⁸ underscores this dependency. Consequently, the government's ability to create and maintain a stable, predictable, and de-risked policy and operational environment is paramount. Challenges such as policy inconsistency²⁹, existing infrastructure gaps, and gas supply issues³⁰ directly threaten investor confidence and the financial viability of projects.

Actions like providing fiscal incentives, streamlining project approval cycles from a potential 36 months to under six months³¹, and working towards ensuring gas supply at discounted rates³² are direct measures to mitigate these risks. The US\$6 million investment in the Arete Mini-LNG project, a public-private partnership, is presented as a tangible signal of government commitment to fostering such collaborations.³³ Any faltering in this commitment or failure to address operational risks could significantly impede the flow of private capital, thereby jeopardising the initiative's overall objectives.

²³ Nigeria Unleashed: CNG and the Business of Clean Energy - Forbes Africa, accessed June 8, 2025, <https://www.forbesafrica.com/africa-undiscovered/2025/06/09/nigeria-unleashed-cng-and-the-business-of-clean-energy/>

²⁴ Nigeria Unleashed: CNG and the Business of Clean Energy - Forbes Africa, accessed June 6, 2025, <https://www.forbesafrica.com/africa-undiscovered/2025/06/11/nigeria-unleashed-cng-and-the-business-of-clean-energy-2/>

²⁵ Nigeria: Tinubu's CNG Initiative Faces Growing Backlash Over Poor Infrastructure, accessed June 4, 2025, <https://westafricaweekly.com/nigeria-tinubus-cng-initiative-faces-growing-backlash-over-poor-infrastructure/>

²⁶ Nigeria's CNG initiative is drawing significant investment interest - Oluwagbemi, Pi-CNG programme director - Businessday NG, accessed June 4, 2025, <https://businessday.ng/interview/article/nigerias-cng-initiative-is-drawing-significant-investment-interest-oluwagbemi-pi-cng-programme-director/>

²⁷ Nigeria Unleashed: CNG and the Business of Clean Energy - Forbes Africa, accessed June 8, 2025, <https://www.forbesafrica.com/africa-undiscovered/2025/06/09/nigeria-unleashed-cng-and-the-business-of-clean-energy/>

²⁸ Ibid

²⁹ Why Nigeria's CNG drive is faltering - 21st CENTURY CHRONICLE, accessed June 8, 2025, <https://21stcenturychronicle.com/why-nigerias-cng-drive-is-faltering/>

³⁰ Nigeria: Tinubu's CNG Initiative Faces Growing Backlash Over Poor Infrastructure, accessed June 4, 2025, <https://westafricaweekly.com/nigeria-tinubus-cng-initiative-faces-growing-backlash-over-poor-infrastructure/>

³¹ Nigeria Unleashed: CNG and the Business of Clean Energy - Forbes Africa, accessed June 8, 2025, <https://www.forbesafrica.com/africa-undiscovered/2025/06/09/nigeria-unleashed-cng-and-the-business-of-clean-energy/>

³² Pi-CNG to inaugurate CNG refuelling stations in five states, Abuja April 25 | TheCable, accessed June 9, 2025, <https://www.thecable.ng/Pi-CNG-to-inaugurate-cng-refuelling-stations-in-five-states-abuja-april-25/>

³³ Nigeria Unleashed: CNG and the Business of Clean Energy - Forbes Africa, accessed June 6, 2025, <https://www.forbesafrica.com/africa-undiscovered/2025/06/11/nigeria-unleashed-cng-and-the-business-of-clean-energy-2/>

National Progress in CNG Adoption & Infrastructure Development

A. Investment Landscape: Funding Mobilisation and Key Contributors

The Presidential CNG Initiative has demonstrated notable success in mobilising investment, with initial reports estimated at around US\$200 million³⁴, and later figures reaching over US\$450 million.³⁵ More recent announcements, especially from mid-2025, consistently show that the CNG sector has attracted over US\$500 million in investments since the initiative's intensified rollout.³⁶ This substantial capital inflow underscores growing investor confidence and the perceived commercial viability of CNG in Nigeria.

The primary driver of this investment has been the private sector. However, public funds have also played a crucial catalytic role. The Midstream and Downstream Gas Infrastructure Fund (MDGIF), established under the Petroleum Industry Act (PIA) to promote gas infrastructure, has been a significant contributor. In October 2024, MDGIF approved ₦122 billion for various gas projects, a portion of which was directed towards CNG infrastructure.³⁷

More recently, MDGIF awarded equity investments to ten new project developers, with three of these specifically focused on developing CNG stations.³⁸ This is in addition to four of its six initial ₦123 billion investments made in the previous year, also being directed at the CNG sub-sector.³⁹ The MDGIF is also collaborating on the development of CNG infrastructure in federal universities.⁴⁰

Specific project financing instances further illustrate the investment dynamics. For example, the Arete Mini-LNG project secured a US\$6 million investment through a public-private partnership aimed at expanding CNG access to Northern Nigeria.⁴¹ LNG Arete Ltd is also reported to be investing \$12 million to boost CNG use, especially in the northern region.⁴²

³⁴Nigeria Unleashed: CNG and the Business of Clean Energy - Forbes Africa, accessed June 8, 2025, <https://www.forbesafrica.com/africa-undiscovered/2025/06/09/nigeria-unleashed-cng-and-the-business-of-clean-energy/>

³⁵ FG launches Project SPROUT to deploy CNG buses, tricycles in universities nationwide, accessed June 5, 2025, <https://nairametrics.com/2025/05/29/fg-launches-project-sprout-to-deploy-cng-buses-tricycles-in-universities-nationwide/>

³⁶50000 vehicles converted as CNG investments hit \$500m - Punch Newspapers, accessed June 11, 2025, <https://punchng.com/50000-vehicles-converted-as-cng-investments-hit-500m/>

³⁷2025 Nigerian CNG Industry Report - Agosto Store, accessed June 13, 2025, <https://www.agustoresearch.com/report/2025-nigerian-cng-industry-report/>

³⁸50000 vehicles converted as CNG investments hit \$500m - Punch Newspapers, accessed June 11, 2025, <https://punchng.com/50000-vehicles-converted-as-cng-investments-hit-500m/>

³⁹Nigeria's CNG initiative attract over \$500m investment in 2024 - PI-CNG - Businessday NG, accessed June 6, 2025, <https://businessday.ng/energy/article/nigerias-cng-initiative-attract-over-500m-investment-in-2024-pi-cng/>

⁴⁰PI-CNG to inaugurate CNG refuelling stations in five states, Abuja April 25 | TheCable, accessed June 9, 2025, <https://www.thecable.ng/Pi-CNG-to-inaugurate-cng-refuelling-stations-in-five-states-abuja-april-25/>

⁴¹Nigeria Unleashed: CNG and the Business of Clean Energy - Forbes Africa, accessed June 8, 2025, <https://www.forbesafrica.com/africa-undiscovered/2025/06/09/nigeria-unleashed-cng-and-the-business-of-clean-energy/>

⁴²Presidential CNG Initiative signs MoU with firm to expand gas-powered transport, accessed June 7, 2025, <https://smallbusinessinsights.ng/presidential-cng-initiative-signs-mou-with-lng-arete-to-expand-gas-powered-transport/>

The interplay between public seed funding and private investment mobilisation appears to be a key feature of the Pi-CNG's financial strategy. Given that the CNG market was virtually non-existent before the initiative⁴³, private investors would naturally be cautious. Strategic public investments, such as those from MDGIF, serve to de-risk the nascent market by supporting foundational infrastructure and demonstrating government commitment. This, in turn, appears to be unlocking larger flows of private capital. This leverage model, where targeted public funding in critical enabling infrastructure acts as a catalyst for broader private sector participation, is vital for sustaining the momentum of the initiative. Continued public investment in areas like gas transmission pipelines (such as the Ajaokuta-Kaduna-Kano pipeline) and mother station development could be instrumental in maintaining this positive private sector investment momentum.

B. Expansion of CNG Refuelling Infrastructure

A critical determinant of CNG adoption is the availability and accessibility of refuelling stations. The Pi-CNG has focused significantly on expanding this network from a very low base.

i. Growth in Refuelling Stations (Mother and Daughter Stations)

Prior to May 2024, Nigeria had only about 11 operational CNG stations, largely remnants of a 2017 pilot scheme by the Nigerian National Petroleum Company Limited (NNPCL).⁴⁴ Some sources indicate there were 23 stations, mostly used for power generation, as of October 2023.⁴⁵ Progress since then has been notable, though figures vary across reports. As of mid-2025:

- The Pi-CNG reported the establishment of 53 new CNG dispensing daughter stations.⁴⁶
- The Nigerian Midstream and Downstream Petroleum Regulatory Authority (NMDPRA) stated that refuelling capacity had risen from 20 to 56 stations.⁴⁷
- The Pi-CNG also mentioned over 65 stations in operation.⁴⁸
- An industry report from April 2025 cited an estimated 27 mother stations (compression hubs) and 63 daughter stations (refuelling outlets).⁴⁹
- A CNG station locator application, sourcing data from the Pi-CNG, listed 160 active stations.⁵⁰

⁴³50000 vehicles converted as CNG investments hit \$500m - Punch Newspapers, accessed June 11, 2025, <https://punchng.com/50000-vehicles-converted-as-cng-investments-hit-500m/>

⁴⁴ibid

⁴⁵MEMAN: Over 250 Centers, \$500 Investment - Nigeria's CNG Push Gains Momentum, accessed June 3, 2025, <https://environmentafricamag.com/2025/05/23/meman-over-250-centers-500-investment-nigerias-cng-push-gains-momentum/>

⁴⁶50000 vehicles converted as CNG investments hit \$500m - Punch Newspapers, accessed June 11, 2025, <https://punchng.com/50000-vehicles-converted-as-cng-investments-hit-500m/> NMDPRA says Nigeria's CNG conversion capacity

⁴⁷increased by 2,500% - Peoples Gazette, accessed May 21, 2025, <https://gazettengr.com/nmdpra-says-nigerias-cng-conversion-capacity-increased-by-2500/>

⁴⁸FG to Roll Out 175 New CNG Stations Within 18 Months as Vehicle Conversions Surge, accessed May 21, 2025, <https://www.tv360nigeria.com/fg-to-roll-out-175-new-cng-stations-within-18-months-as-vehicle-conversions-surge/>

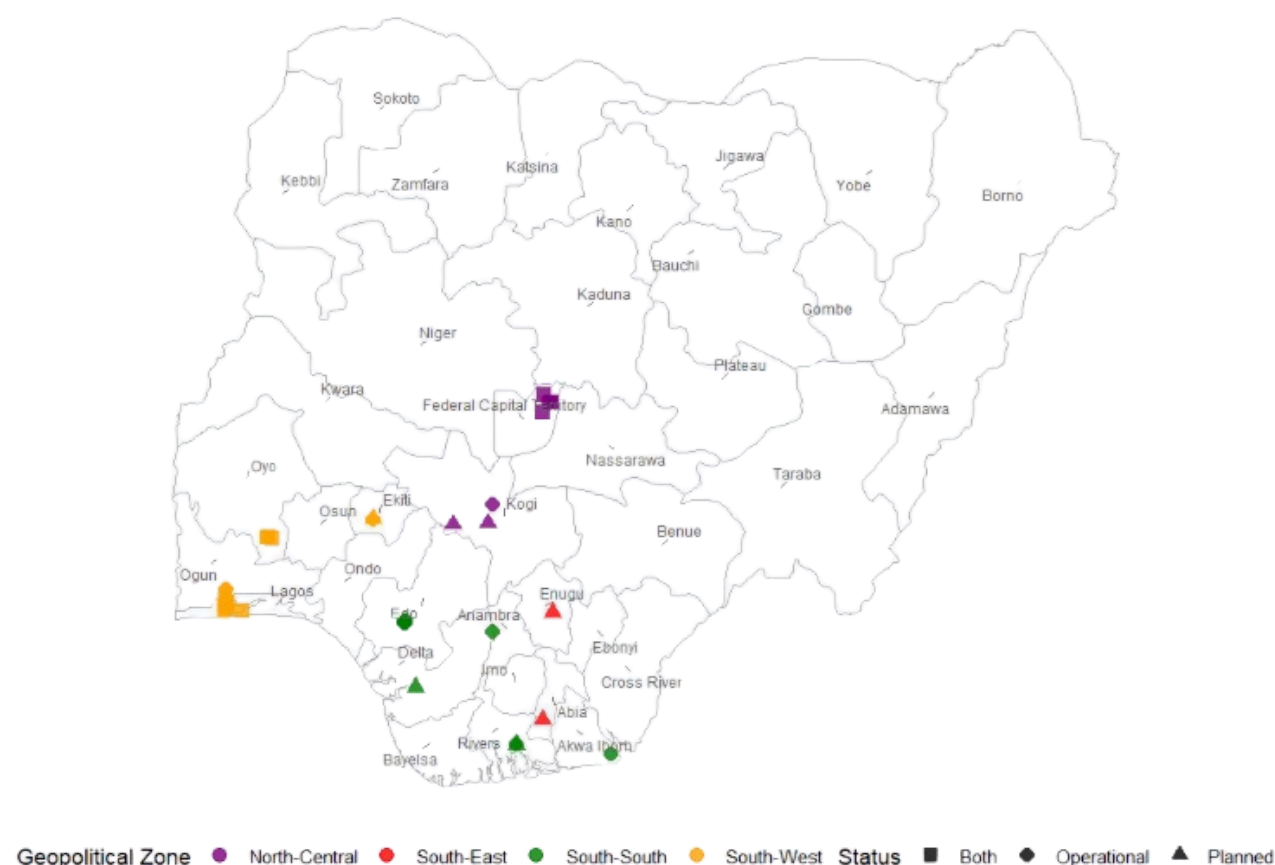
⁴⁹2025 Nigerian CNG Industry Report - Agosto Store, accessed June 13, 2025, <https://www.agustoresearch.com/report/2025-nigerian-cng-industry-report/>

The discrepancies likely reflect different reporting timelines, definitions (e.g., including private fleet stations vs. public access), and stages of operational readiness. However, the trend clearly indicates significant growth. Looking ahead, over 175 additional stations are reported to be under development or planned for rollout by various partners. The Pi-CNG is directly backing partners to roll out 24 of these sites within the next six to nine months.⁵¹ Specific commissioning events were scheduled between April 25 and May 29, 2025, for new stations in Enugu, FCT (Abuja), Lokoja (Kogi), Port Harcourt (Rivers), Ado Ekiti (Ekiti), and Abia.⁵²

ii. Deployment Across Geopolitical Zones: An Assessment of Equity

The geographical distribution of these refuelling stations is a critical aspect of the initiative's success and inclusivity.

CNG Refuelling Stations in Nigeria - Operational and Planned (Mid-2025)
Distribution by Geopolitical Zone and Status



Note: This map is indicative and based on available information. Greenville's 51 LCNG stations plan covers multiple locations in the North and South-East.⁵³ The Arete Mini-LNG project is also targeted at Northern expansion.⁵⁴ Other Sources⁵⁵

⁵⁰NIGERIA CNG Stations Locator App, accessed June 5, 2025, <https://cngnigeria.streamlit.app/>

⁵¹Nigeria's CNG initiative attract over \$500m investment in 2024 - PI-CNG - Businessday NG, accessed June 6, 2025, <https://businessday.ng/energy/article/nigerias-cng-initiative-attract-over-500m-investment-in-2024-pi-cng/>

⁵²Pi-CNG to inaugurate CNG refuelling stations in five states, Abuja April 25 | TheCable, accessed June 9, 2025, <https://www.thecable.ng/Pi-CNG-to-inaugurate-cng-refuelling-stations-in-five-states-abuja-april-25/>

⁵³50000 vehicles converted as CNG investments hit \$500m - Punch Newspapers, accessed June 11, 2025, <https://punchng.com/50000-vehicles-converted-as-cng-investments-hit-500m/>

⁵⁴Pi-CNG to inaugurate CNG refuelling stations in five states, Abuja April 25 | TheCable, accessed June 9, 2025, <https://www.thecable.ng/Pi-CNG-to-inaugurate-cng-refuelling-stations-in-five-states-abuja-april-25/>

⁵⁵'We've progressed with CNG penetration but there's room for improvement', accessed June 1, 2025, <https://thenationonlineng.net/weve-progressed-with-cng-penetration-but-theres-room-for-improvement/>

A significant challenge highlighted is the inequitable distribution of CNG infrastructure, especially the lack of sufficient facilities in the North-East and North-West geopolitical zones.⁵⁶ While Kaduna has some presence, other states in these regions are reportedly underserved. The Pi-CNG acknowledges the limited penetration in the "far north," attributing it partly to the "pipeline constraint": the fact that Nigeria's physical gas pipeline network currently extends only as far north as Ajaokuta in Kogi State (North-Central).⁵⁷

To address this, the initiative is actively promoting "virtual pipeline" solutions. These involve transporting Liquefied Natural Gas (LNG) or Liquefied Compressed Natural Gas (LCNG) by truck from production/liquefaction points (like Ajaokuta, where mini-LNG projects are underway⁵⁸) to off-pipeline regions, where it is then regasified and dispensed as CNG.

Key players like Greenville LNG are deploying LCNG stations across the North (Yola, Lafia, Katsina, Kano, Dutse, Sokoto, Borno) and the South-East.⁵⁹ The Arete Mini-LNG project also aims to drive expansion into the North. While pragmatic, these virtual pipelines introduce logistical complexities and potentially higher last-mile costs compared to direct pipeline supply. The long-term, cost-effective supply to these regions hinges on the completion of major pipeline projects like the Ajaokuta-Kaduna-Kano (AKK) gas pipeline.⁶⁰

iii. Key Public and Private Sector Infrastructure Developers

Several entities are at the forefront of developing Nigeria's CNG refuelling infrastructure:

- **Nigerian National Petroleum Company Limited (NNPCL):** Expanding its initial network of 12 stations to 20, with plans for an additional 40 in its second phase, and a total of 120 new stations in collaboration with partners.⁷⁷ NNPCL is also partnering with NIPCO for 35 stations.⁶¹
- **NIPCO Gas Ltd:** A major private player with 23 operational stations and 8 new ones planned. The company operates 15 AutoCNG stations and has an extensive list of operational conversion centres and stations across several states.⁶²

⁵⁶Reps caucus decries lack of CNG conversion centres in north - The Nation Newspaper, accessed June 8, 2025, <https://thenationonline.ng/reps-caucus-decries-lack-of-cng-conversion-centres-in-north/>

⁵⁷'We've progressed with CNG penetration but there's room for improvement', accessed June 1, 2025, <https://thenationonline.ng/weve-progressed-with-cng-penetration-but-theres-room-for-improvement/>

⁵⁸ibid

⁵⁹50000 vehicles converted as CNG investments hit \$500m - Punch Newspapers, accessed June 11, 2025, <https://punchng.com/50000-vehicles-converted-as-cng-investments-hit-500m/>

⁶⁰Nigeria Unleashed: CNG and the Business of Clean Energy - Forbes Africa, accessed June 8, 2025, <https://www.forbesafrica.com/africa-undiscovered/2025/06/09/nigeria-unleashed-cng-and-the-business-of-clean-energy/>

⁶¹ 50000 vehicles converted as CNG investments hit \$500m - Punch Newspapers, accessed June 11, 2025, <https://punchng.com/50000-vehicles-converted-as-cng-investments-hit-500m/>

⁶²Full list of FG's autogas conversion centres in Nigeria - Businessday NG, accessed June 5, 2025, <https://businessday.ng/news/article/full-list-of-fgs-autogas-conversion-centres-in-nigeria/>

⁶²Beware of Fake Cylinders: List of Approved CNG Conversion Centers across Nigeria, accessed May 6, 2025, <https://nigeriapgas.com/news/list-of-approved-cng-conversion-centers-across-nigeria>

- **Greenville LNG:** Focused on LCNG, rolling out 51 stations across the North and South-East, targeting hard-to-reach areas.⁶³
- **Femadec:** Investing in 21 daughter stations and developing CNG ecosystems in 20 universities.⁶⁴
- **AY Shafa:** Developing 9 daughter stations.⁶⁵
- **Bovas Group:** Launching modern CNG sites, with an 8-station rollout plan, including two in Ibadan.⁶⁶
- **Ibile Oil and Gas (Lagos State):** Planning 10 new daughter stations in Lagos/Ogun and 8 stations in Lagos in partnership with PI-CNG.⁶⁷
- Other significant players include Powergas Global Investment Nigeria Limited and Matrix Energy Group.⁶⁸

C. Growth of Vehicle Conversion Capacity

Parallel to refuelling infrastructure, expanding the capacity to convert existing petrol and diesel vehicles to run on CNG is crucial.

i. Nationwide Conversion Centres: Numbers and Distribution

The number of CNG conversion centres has seen a dramatic increase:

- Baseline: Only 7 functional centres in early 2024 or 2023.⁶⁹
- Current Status (mid-2025):
- Over 140 centres reported in 2024.⁷⁰
- Over 170 by December 2024.⁷¹
- 255 new conversion centres established in the year leading up to mid-2025.⁷²
- 242 certified vehicle conversion centres as of April 2025.⁷³
- 193 centres nationwide, according to another PI-CNG statement.⁷⁴
- The PI-CNG had set a target of 100 conversion centres by the end of 2024, which was exceeded with 130 achieved. The long-term need is estimated at 1,000 centres nationwide to meet the one-million-vehicle conversion goal.⁷⁵

⁶³50000 vehicles converted as CNG investments hit \$500m - Punch Newspapers, accessed June 11, 2025, <https://punchng.com/50000-vehicles-converted-as-cng-investments-hit-500m/>

⁶⁴ibid

⁶⁵ibid

⁶⁶ibid

⁶⁷'We've progressed with CNG penetration but there's room for improvement', accessed June 1, 2025, <https://thenationonlineng.net/weve-progressed-with-cng-penetration-but-theres-room-for-improvement/>

⁶⁸ibid

⁶⁹FG launches campaign to convert 10,000 commercial vehicles into CGN in 10weeks, accessed June 7, 2025, <https://nairametrics.com/2025/01/17/fg-launches-campaign-to-convert-10000-commercial-vehicles-into-cng-in-10-weeks/>

⁷⁰ibid

⁷¹20 federal tertiary institutions to get CNG conversion centres - TheCable, accessed June 12, 2025, <https://www.thecable.ng/twenty-federal-tertiary-schools-to-get-cng-conversion-centres/>

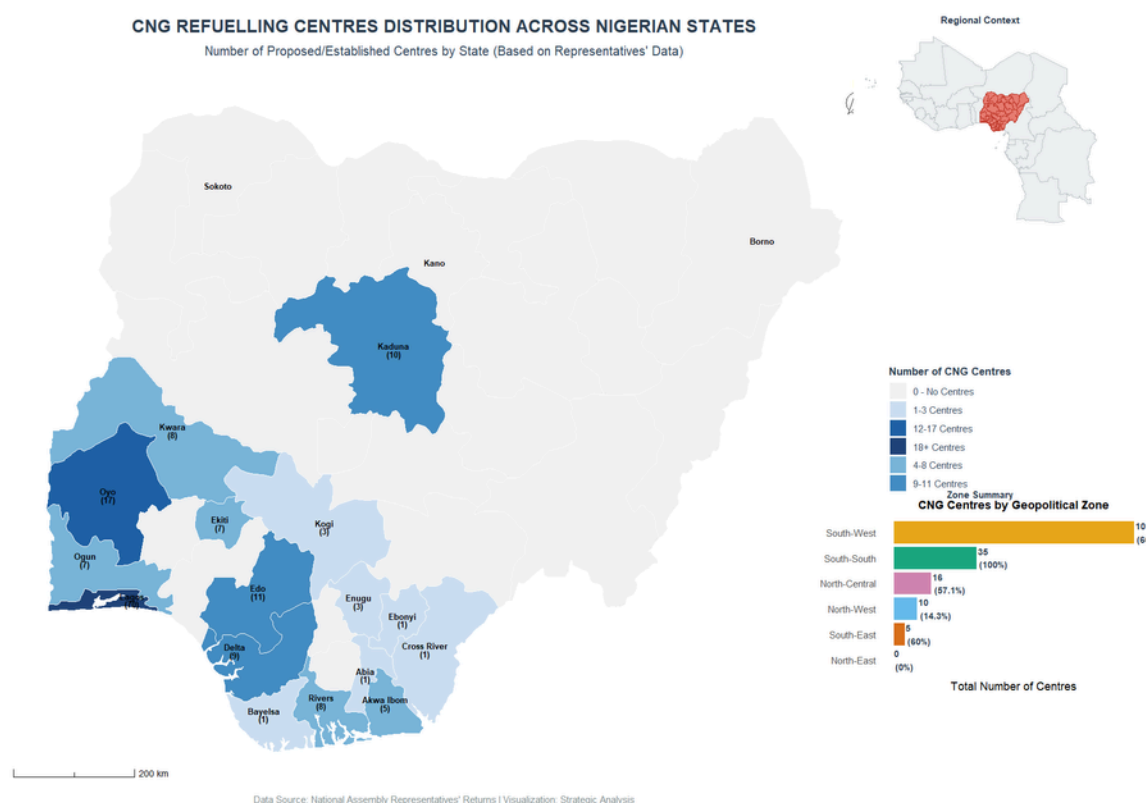
⁷²50000 vehicles converted as CNG investments hit \$500m - Punch Newspapers, accessed June 11, 2025, <https://punchng.com/50000-vehicles-converted-as-cng-investments-hit-500m/>

⁷³2025 Nigerian CNG Industry Report - Agosto Store, accessed June 13, 2025, <https://www.agustoresearch.com/report/2025-nigerian-cng-industry-report/>

⁷⁴PI-CNG, NURTW open first CNG conversion centre at Lagos motor park, accessed may 27, 2025, <https://guardian.ng/news/pi-cng-nurtw-open-first-cng-conversion-centre-at-lagos-motor-park/>

⁷⁵Nigeria's CNG initiative is drawing significant investment interest - Oluwagbemi, PI-CNG programme director - Businessday NG, accessed June 4, 2025, <https://businessday.ng/interview/article/nigerias-cng-initiative-is-drawing-significant-investment-interest-oluwagbemi-pi-cng-programme-director/>

These centres are reportedly present in 19 states across all six geopolitical zones.⁷⁶ However, as with refuelling stations, there are significant concerns about inequitable distribution. Members of the House of Representatives have decried the lack of conversion centres in the North-East and most of the North-West (with Kaduna State often cited as an exception in the North-West).⁷⁷



Note: This map reflects data presented by lawmakers in May 2025 regarding proposed distribution for the take-off of the initiative and may not represent the full picture of all privately established centres. It primarily serves to illustrate the basis of the regional disparity concerns.

Source: ⁹⁵

The Pi-CNG has launched initiatives like establishing a conversion centre directly within a commercial transport hub (Mile 2 Motor Park, Lagos), with plans to replicate this model.⁷⁸ Lists of approved conversion centres, many operated by NIPCO and other private entities, is available, predominantly in southern and north-central states.⁷⁹

⁷⁶MEMAN: Over 250 Centers, \$500 Investment - Nigeria's CNG Push Gains Momentum, accessed June 3, 2025,

<https://environmentafricamag.com/2025/05/23/meman-over-250-centers-500-investment-nigerias-cng-push-gains-momentum/>

⁷⁷Reps caucus decries lack of CNG conversion centres in north - The Nation Newspaper, accessed June 8, 2025, <https://thenationonline.net/rep-caucus-decries-lack-of-cng-conversion-centres-in-north/>

⁹⁵ibid

⁷⁸PI-CNG, NURTW open first CNG conversion centre at Lagos motor park, accessed May 27, 2025, <https://guardian.ng/news/Pi-CNG-nurtw-open-first-cng-conversion-centre-at-lagos-motor-park/>

⁷⁹Beware of Fake Cylinders: List of Approved CNG Conversion Centers across Nigeria, accessed May 6, 2025, <https://nigeriapgas.com/news/list-of-approved-cng-conversion-centers-across-nigeria>

ii. Local Manufacturing and Assembly Initiatives

A crucial strategic shift for the long-term sustainability and cost-effectiveness of the Pi-CNG is the move towards domesticating the value chain, especially for conversion kits and components. Currently, there's a heavy reliance on imported kits. To address this, the following initiatives are underway:

- Plans to collaborate with private firms to establish a manufacturing park for CNG kits in Ajaokuta, Kogi State.⁸⁰
- A new facility in Ikorodu, Lagos State, is set to produce seamless steel pipes for CNG cylinders, a critical step in localising the supply chain for these high-pressure components.⁸¹

These local manufacturing efforts are vital. They promise to reduce the country's dependence on imports, thereby mitigating exposure to foreign exchange volatility and global supply chain disruptions. Furthermore, domestic production can lower the overall cost of conversion kits, enhance affordability for Nigerians, and create skilled manufacturing jobs, deepening the economic impact of the Pi-CNG. This transition from importation to local production signifies a maturation of the CNG ecosystem strategy, aiming for greater self-reliance and value retention within Nigeria.

D. Vehicle Fleet Transformation

The ultimate measure of the Pi-CNG's impact on transportation is the number and type of vehicles transitioned to CNG.

i. Overall Vehicle Conversions and Progress Towards Targets

Reported figures for total vehicle conversions have varied with time and source:

- As of mid-2025, reports indicate "over 50,000 vehicles" converted, with this number "rising to 100,000 soon".⁸²
- Other sources mention "40,000+" vehicles running on CNG.⁸³
- Under an initial programme involving 22,000 procured conversion kits, the Pi-CNG was on course for 10,000 conversions by the end of Q1 2025.⁸⁴
- Weekly conversion rates are reported to be between 1,500 to 2,000 vehicles.⁸⁵

⁸⁰Presidential CNG Initiative signs MoU with firm to expand gas-powered transport, accessed June 7, 2025, <https://smallbusinessinsights.ng/presidential-cng-initiative-signs-mou-with-Ing-arete-to-expand-gas-powered-transport/>

⁸¹FG to Roll Out 175 New CNG Stations Within 18 Months as Vehicle Conversions Surge, accessed May 21, 2025, <https://www.tv360nigeria.com/fg-to-roll-out-175-new-cng-stations-within-18-months-as-vehicle-conversions-surge/>

⁸²50000 vehicles converted as CNG investments hit \$500m - Punch Newspapers, accessed June 11, 2025, <https://punchng.com/50000-vehicles-converted-as-cng-investments-hit-500m/>

⁸³MEMAN: Over 250 Centers, \$500 Investment - Nigeria's CNG Push Gains Momentum, accessed June 3, 2025, <https://environmentafricamag.com/2025/05/23/meman-over-250-centers-500-investment-nigerias-cng-push-gains-momentum/>

⁸⁴CNG attracts \$491m investment in one year - Presidency | The Guardian Nigeria News, accessed June 11, 2025, <https://guardian.ng/news/cng-attracts-491m-investment-in-one-year-presidency/>

⁸⁵FG to Roll Out 175 New CNG Stations Within 18 Months as Vehicle Conversions Surge, accessed May 21, 2025, <https://www.tv360nigeria.com/fg-to-roll-out-175-new-cng-stations-within-18-months-as-vehicle-conversions-surge/>

The ambitious target remains one million vehicles converted by 2027.⁸⁶ Current conversion figures, even at 100,000, represent less than 1 percent of Nigeria's estimated 12 million registered vehicles⁸⁷, highlighting the scale of the task ahead.

ii. Conversion of Commercial and Private Vehicles

The initiative has placed a strong emphasis on commercial vehicles, recognising their high fuel consumption and impact on public transport costs.

- The "10-for-10 Campaign" was launched in January 2025 to convert 10,000 commercial vehicles in Abuja and Lagos to CNG within 10 weeks, offering free conversions.⁸⁸
- A broader Conversion Incentive Programme targets commercial and ride-share drivers.⁸⁹
- Large private sector companies like Dangote and BUA are also reported to be converting their truck fleets to CNG.⁹⁰

For private vehicle owners, the high upfront cost of conversion (N300,000-N600,000 according to some government estimates⁹¹, or N1.2 million - N1.5 million before a 50 percent government subsidy as per other analyses⁹²) remains a significant deterrent.

iii. Government Fleet: Procured CNG Buses/Tricycles and Converted Vehicles

The government is actively involved in procuring CNG vehicles and facilitating conversions for public sector use to stimulate demand and demonstrate commitment.

- **Tricycles:** Distribution of 2,000 CNG-powered tricycles as part of the initiative. A Phase 1 flag-off of the tricycle deployment programme with National Commercial Motorcycle And Tricycle Owners/Riders Association (NACTOMORAS) and the Federal Ministry of Youths occurred on April 15, 2025.⁹³ Reports also mention 63 tricycles added under the mass transit programme.⁹⁴

⁸⁶Nigeria: Tinubu's CNG Initiative Faces Growing Backlash Over Poor Infrastructure, accessed June 4, 2025, <https://westafricaweekly.com/nigeria-tinubu-cng-initiative-faces-growing-backlash-over-poor-infrastructure/>

⁸⁷2025 Nigerian CNG Industry Report - Agosto Store, accessed June 13, 2025, <https://www.agustoresearch.com/report/2025-nigerian-cng-industry-report/>

⁸⁸FG launches campaign to convert 10,000 commercial vehicles into CNG in 10 weeks, accessed June 7, 2025, <https://nairametrics.com/2025/01/17/fg-launches-campaign-to-convert-10000-commercial-vehicles-into-cng-in-10-weeks/>

⁸⁹NIGERIA CNG Stations Locator App, accessed June 5, 2025, <https://cngnigeria.streamlit.app/>

⁹⁰FG to Roll Out 175 New CNG Stations Within 18 Months as Vehicle Conversions Surge, accessed May 21, 2025, <https://www.tv360nigeria.com/fg-to-roll-out-175-new-cng-stations-within-18-months-as-vehicle-conversions-surge/>

⁹¹Compressed Natural Gas Adoption in Nigeria: Benefits and Barriers - LightRay! Media, accessed June 8, 2025, <https://lightraymedia.org/2024/10/25/compressed-natural-gas-adoption-in-nigeria-benefits-and-barriers>

⁹²5 Things You Need to Know Before Switching to CNG in Nigeria - Haul247, accessed June 8, 2025, <https://www.haul247.co/resources/blog/5-things-you-need-to-know-before-switching-to-cng-in-nigeria>

⁹³Pi-CNG to inaugurate CNG refuelling stations in five states, Abuja April 25 | TheCable, accessed June 9, 2025, <https://www.thecable.ng/Pi-CNG-to-inaugurate-cng-refuelling-stations-in-five-states-abuja-april-25/>

⁹⁴MEMAN: Over 250 Centers, \$500 Investment - Nigeria's CNG Push Gains Momentum, accessed June 3, 2025, <https://environmentafricamag.com/2025/05/23/meman-over-250-centers-500-investment-nigerias-cng-push-gains-momentum/>

- **Buses:** The Pi-CNG procured a total of 655 buses, of which 421 are CNG-powered (with 36 being Electric Vehicles). So far, 405 buses (a mix of CNG and EV) have been deployed. Some were part of the settlement terms with the Nigeria Labour Congress (NLC) and Trade Union Congress (TUC) during wage negotiations, while others are operated commercially by transport unions in partnership with the Federal Ministry of Transportation or under the "Renewed Hope Mass Transit" scheme.⁹⁵ An additional 191 new buses were reported under the mass transit programme.⁹⁶
- **Public Sector Employees:** A groundbreaking agreement was signed on April 11, 2025, between Pi-CNG and Public Sector Unions for CNG conversions to be delivered to 200,000 public sector employees. The Credit Corp, another Presidential initiative, is expected to help finance the balance of conversion costs for these employees.⁹⁷
- **Security Agencies:** Handover of buses and launch of targeted conversion programmes for servicemen of the Nigerian Army were scheduled for the week of May 5, 2025.⁹⁸
- **Universities (Project SPROUT):** The "Special Palliative Relief of University Transportation" (SPROUT) project, launched on May 29, 2025, involves the deployment of CNG-powered buses and tricycles to university campuses nationwide to provide affordable transportation for students and staff.⁹⁹
- **Airport Taxis:** 800 taxis operating at Abuja Airport were converted to CNG in October 2024.¹⁰⁰

⁹⁵CNG attracts \$491m investment in one year - Presidency | The Guardian Nigeria News, accessed June 11, 2025, <https://guardian.ng/news/cng-attracts-491m-investment-in-one-year-presidency/>

⁹⁶MEMAN: Over 250 Centers, \$500 Investment - Nigeria's CNG Push Gains Momentum, accessed June 3, 2025, <https://environmentafricamag.com/2025/05/23/meman-over-250-centers-500-investment-nigerias-cng-push-gains-momentum/>

⁹⁷Pi-CNG to inaugurate CNG refuelling stations in five states, Abuja April 25 | TheCable, accessed June 9, 2025, <https://www.thecable.ng/Pi-CNG-to-inaugurate-cng-refuelling-stations-in-five-states-abuja-april-25/>

⁹⁸ ibid

⁹⁹FG launches Project SPROUT to deploy CNG buses, tricycles in universities nationwide, accessed June 5, 2025, <https://nairametrics.com/2025/05/29/fg-launches-project-sprout-to-deploy-cng-buses-tricycles-in-universities-nationwide/>

¹⁰⁰ibid

Category	Number Reported	Proposed Target	Key Implementing Partners/Programmes	Source Snippet(s)
Total Vehicles Converted (Private/Commercial)	50,000+ (rising to 100,000)	1 million by 2027	Pi-CNG, Private Sector, Conversion Incentive Programme, "10-for-10 Campaign"	101
New CNG Tricycles Deployed (Govt/Partnership)	2,000 (initial plan); 63 (mass transit)	N/A	PI-CNG, NACTOMORAS, Fed. Min. of Youths	102
New CNG Buses Procured/Deployed (Govt/Partnership)	421 CNG buses procured (part of 655 total); 405 (mixed) deployed; 191 (mass transit)	N/A	PI-CNG, Fed. Min. of Finance, NLC/TUC, Transport Unions, Renewed Hope Mass Transit	103
Planned Public Sector Employee Vehicle Conversions	200,000	N/A	PI-CNG, Public Sector Unions, Credit Corp	104
Nigerian Army Vehicle Conversions/Bus Handover	Programme launched (specific numbers not detailed)	N/A	PI-CNG, Nigerian Army	105
University Vehicle Deployments (Project SPROUT)	Nationwide deployment (specific numbers not yet detailed)	N/A	PI-CNG, Universities, FEMADEC Energy, MDGIF	106
Abuja Airport Taxi Conversions	800	N/A	PI-CNG	107

¹⁰¹50000 vehicles converted as CNG investments hit \$500m - Punch Newspapers, accessed June 11, 2025, <https://punchng.com/50000-vehicles-converted-as-cng-investments-hit-500m/>

¹⁰²MEMAN: Over 250 Centers, \$500 Investment - Nigeria's CNG Push Gains Momentum, accessed June 3, 2025, <https://environmentafricamag.com/2025/05/23/meman-over-250-centers-500-investment-nigerias-cng-push-gains-momentum/>

¹⁰³ ibid

¹⁰⁴Pi-CNG to inaugurate CNG refuelling stations in five states, Abuja April 25 | TheCable, accessed June 9, 2025, <https://www.thecable.ng/Pi-CNG-to-inaugurate-cng-refuelling-stations-in-five-states-abuja-april-25/>

¹⁰⁵ ibid

¹⁰⁶FG launches Project SPROUT to deploy CNG buses, tricycles in universities nationwide, accessed June 5, 2025, Pi-CNG to inaugurate CNG refuelling stations in five states, Abuja April 25 | TheCable, accessed June 9, 2025, <https://www.thecable.ng/Pi-CNG-to-inaugurate-cng-refuelling-stations-in-five-states-abuja-april-25/>

¹⁰⁷ ibid

E. Human Capital and Skills Development

The transition to a CNG-based transportation system necessitates a skilled workforce and public awareness. The Pi-CNG has initiated several programmes in this regard:

Technician Training:

- Over 8,000 technicians have reportedly been trained. This includes 500 trained directly through Pi-CNG grant partners and another 500 through affiliates such as the Nigerian Institute of Transport Technology (NITT) and the Ministry of Labour.¹⁰⁸
- Another report mentions 500+ technicians trained to support installations and repairs.¹⁰⁹
- The National Automotive Design and Development Council (NADDC) conducted training for 60 technicians in March 2025 on converting vehicles to CNG ¹¹⁰ and is involved in further youth training.
- Ogun State commenced training for beneficiaries on the calibration stage of vehicle conversion.¹¹¹
- Conversion centres themselves are intended to serve as training hubs, with some programmes offering stipends to trainees and integration into the national Technical, Vocational, and Entrepreneurship Training (TVET) framework.¹¹²

Specialised Training:

- A "Security Services Train the Trainer Programme" for workshop technicians from the Nigerian Army, Navy, Air Force, and Police held on May 19, 2025.¹¹³

Artisan and Driver Training:

- A "Basic Awareness Training Launch" for auto technicians and artisans was conducted [AA1] [DO(F2)] on May 29, 2025.¹¹⁴
- The Pi-CNG is rolling out a free Basic Awareness Training programme across all 36 states and the FCT.¹¹⁵
- Beneficiaries of the 2,000 CNG tricycles are required to complete sensitization training on operating and maintaining them.¹¹⁶

¹⁰⁸Nigeria's CNG initiative is drawing significant investment interest – Oluwagbemi, Pi-CNG programme director - Businessday NG, accessed June 4, 2025, <https://businessday.ng/interview/article/nigerias-cng-initiative-is-drawing-significant-investment-interest-oluwagbemi-pi-cng-programme-director/>

¹⁰⁹MEMAN: Over 250 Centers, \$500 Investment - Nigeria's CNG Push Gains Momentum, accessed June 3, 2025, <https://environmentafricamag.com/2025/05/23/meman-over-250-centers-500-investment-nigerias-cng-push-gains-momentum/>

¹¹⁰NADDC Unveils CNG Empowerment Awareness Programme - THISDAYLIVE, accessed June 8, 2025, <https://www.thisdaylive.com/2025/03/22/naddc-unveils-cng-empowerment-awareness-programme/>

¹¹¹Ogun commences training on CNG vehicle conversion - The Guardian Nigeria News, accessed May 25, 2025, <https://guardian.ng/news/ogun-commences-training-on-cng-vehicle-conversion/>

¹¹²Pi-CNG, NURTW open first CNG conversion centre at Lagos motor park, accessed May 27, 2025, <https://guardian.ng/news/Pi-CNG-nurtw-open-first-cng-conversion-centre-at-lagos-motor-park/>

¹¹³ Pi-CNG to inaugurate CNG refuelling stations in five states, Abuja April 25 | TheCable, accessed June 9, 2025, <https://www.thecable.ng/Pi-CNG-to-inaugurate-cng-refuelling-stations-in-five-states-abuja-april-25/>

¹¹⁴ibid

¹¹⁵Pi-CNG, NURTW open first CNG conversion centre at Lagos motor park, accessed May 27, 2025, <https://guardian.ng/news/Pi-CNG-nurtw-open-first-cng-conversion-centre-at-lagos-motor-park/>

¹¹⁶Federal Government of Nigeria Presidential CNG Initiative (Pi-CNG) 2025 | How To Apply, accessed June 7, 2025, <https://www.scholarshipregion.com/presidential-cng-initiative/>

Public Awareness Campaigns:

- Intensive awareness campaigns were conducted from May to October 2024 to address low public interest and misinformation about CNG.¹¹⁸
- Despite these efforts, there is an acknowledged need for more comprehensive public education on the benefits, safety, and operational aspects of CNG vehicles.

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The rapid expansion of conversion activities brings forth a dual challenge in skill development: ensuring not only enough trained technicians but also guaranteeing the quality and safety of their work. While thousands are being trained, the emergence of safety concerns linked to improper conversions¹²⁰ suggests a potential gap. Robust certification, continuous professional development, and stringent quality control mechanisms for technicians are essential to build and maintain public trust. The planned Nigerian Gas Vehicle Monitoring System (NGVMS) and the integration of training into TVET programmes are positive steps towards addressing this quality assurance aspect.



¹¹⁸50000 vehicles converted as CNG investments hit \$500m - Punch Newspapers, accessed June 11, 2025, <https://punchng.com/50000-vehicles-converted-as-cng-investments-hit-500>

¹¹⁹Compressed Natural Gas Adoption in Nigeria: Benefits and Barriers - LightRay! Media, accessed June 8, 2025, <https://lightraymedia.org/2024/10/25/compressed-natural-gas-adoption-in-nigeria-benefits-and-barriers>

¹²⁰Nigeria: Tinubu's CNG Initiative Faces Growing Backlash Over Poor Infrastructure, accessed June 4, 2025, <https://westafricaweekly.com/nigeria-tinubu-cng-initiative-faces-growing-backlash-over-poor-infrastructure/>

Critical Analysis: Successes, Challenges, and Areas for Improvement

The Presidential CNG Initiative, in its relatively short period of intensified operation, has registered notable achievements while also encountering significant hurdles. A balanced assessment is crucial for charting an effective path forward.

A. What Has Worked Well: Key Achievements and Positive Impacts

i. Economic Benefits:

One of the most significant successes of the Pi-CNG has been the demonstration of substantial cost savings for vehicle operators. With CNG priced at approximately ₦200 per standard cubic meter (scm) compared to petrol at around ₦1,000 per litre, users have reported fuel cost reductions of about 60 percent.¹²¹

The initiative has also made strides in job creation. Multiple sources report the creation of over 10,000 direct jobs within the CNG sector.¹²² Some estimates are even higher, suggesting 9,000 direct and 75,000 indirect jobs.¹²³ These opportunities span conversion, maintenance, refuelling station operations, and potentially local manufacturing in the future.

Furthermore, the Pi-CNG has been successful in attracting investment, with over US\$500 million mobilised, predominantly from the private sector.¹²⁴ This indicates a growing confidence in the commercial viability of the CNG market in Nigeria.

ii. Environmental Gains and Energy Security Contributions:

CNG is inherently a cleaner-burning fuel than petrol or diesel, producing lower emissions of carbon dioxide, nitrogen oxides, and particulate matter. The adoption of CNG aligns with Nigeria's commitments under the Paris Agreement and its domestic goals, such as the target to eliminate routine gas flaring. While quantifying the exact emission reductions achieved so far requires detailed data¹²⁵ and calculations, the shift towards CNG inherently contributes to improved air quality, especially in congested urban areas.

¹²¹Nigeria Unleashed: CNG and the Business of Clean Energy - Forbes Africa, accessed June 6, 2025, <https://www.forbesafrica.com/africa-undiscovered/2025/06/11/nigeria-unleashed-cng-and-the-business-of-clean-energy-2/>

¹²²50000 vehicles converted as CNG investments hit \$500m - Punch Newspapers, accessed June 11, 2025, <https://punchng.com/50000-vehicles-converted-as-cng-investments-hit-500m/>

¹²³ CNG attracts \$491m investment in one year - Presidency | The Guardian Nigeria News, accessed June 11, 2025, <https://guardian.ng/news/cng-attracts-491m-investment-in-one-year-presidency/>

¹²⁴50000 vehicles converted as CNG investments hit \$500m - Punch Newspapers, accessed June 11, 2025, <https://punchng.com/50000-vehicles-converted-as-cng-investments-hit-500m/>

¹²⁵Nigeria Unleashed: CNG and the Business of Clean Energy - Forbes Africa, accessed June 8, 2025, <https://www.forbesafrica.com/africa-undiscovered/2025/06/09/nigeria-unleashed-cng-and-the-business-of-clean-energy/>

The initiative significantly enhances energy security by promoting the utilisation of Nigeria's vast and underutilised domestic natural gas reserves. This reduces the nation's dependence on imported petroleum products, thereby conserving valuable foreign exchange and insulating the transport sector to some extent from global oil price volatility.¹²⁶

iii. Private Sector Engagement and Partnership Models:

A key strength of the Pi-CNG has been its emphasis on a private-sector-led rollout. The ability to attract substantial private capital and leverage private sector expertise in infrastructure development and service delivery is a significant achievement.

The initiative has also fostered partnerships with key stakeholder groups. Collaborations with major transport unions such as the National Union of Road Transport Workers (NURTW), Road Transport Employers Association of Nigeria (RTEAN), Nigerian Association of Road Transport Owners (NARTO), and Painted Taxi Association of Nigeria (PTAN) have been instrumental in promoting conversions among commercial vehicle operators and implementing fare reduction schemes.

¹²⁷ Partnerships are also being forged with universities for infrastructure deployment (e.g., Project SPROUT) and potentially for research and development.¹²⁸

B. What should we focus on improving?

Despite the progress, the Pi-CNG faces several critical challenges that impede its pace and impact.

i. Infrastructure Deficiencies and Regional Disparities:

A primary concern is the inadequacy of refuelling infrastructure relative to growing demand and the ambitious conversion targets. While the number of stations has increased, it is still insufficient, leading to long queues at existing facilities. The Pi-CNG itself acknowledges that queues are expected to rise with increasing vehicle conversions. Beyond sheer numbers, the strategic location and overall distribution network for CNG remain underdeveloped.¹²⁹

¹²⁶Nigeria Unleashed: CNG and the Business of Clean Energy - Forbes Africa, accessed June 8, 2025, <https://www.forbesafrica.com/africa-undiscovered/2025/06/09/nigeria-unleashed-cng-and-the-business-of-clean-energy/>

¹²⁷FG launches campaign to convert 10,000 commercial vehicles into CNG in 10 weeks, accessed June 7, 2025, <https://nairametrics.com/2025/01/17/fg-launches-campaign-to-convert-10000-commercial-vehicles-into-cng-in-10-weeks/>

¹²⁸FG launches Project SPROUT to deploy CNG buses, tricycles in universities nationwide, accessed June 5, 2025, <https://nairametrics.com/2025/05/29/fg-launches-project-sprout-to-deploy-cng-buses-tricycles-in-universities-nationwide/>

¹²⁹Why Nigeria's CNG drive is faltering - 21st CENTURY CHRONICLE, accessed June 8, 2025, <https://21stcenturychronicle.com/why-nigerias-cng-drive-is-faltering/>

Compounding this is the inequitable geographical distribution of both refuelling stations and conversion centres. As highlighted by lawmakers and civil society groups, the North-East and North-West geopolitical zones are significantly underserved, creating a disparity in access to the benefits of the CNG programme.¹³⁰ This regional imbalance risks undermining the national scope and inclusivity of the initiative.

ii. Affordability of Conversions and Access to Finance:

The high upfront cost of converting vehicles to run on CNG remains a major barrier for many Nigerians, especially private vehicle owners and small-scale transport operators. Conversion costs are estimated to range from N300,000 to N600,000 by some government sources¹³¹, while other analyses suggest N1.2 million to N1.5 million before a 50 percent government subsidy is applied.¹³² Even with subsidies, this initial outlay is substantial for average Nigerians.

While the government offers discounts and is considering flexible payment options, such as the "Convert and Pay Later" portal and financing arrangements for public servants through the Credit Corp, access to these and other affordable financing mechanisms appears limited or not yet widely effective for the broader population.¹³³

iii. Gas Supply Chain Integrity and Refuelling Experience:

Bottlenecks in the gas supply chain and persistent supply shortages to refuelling stations have been reported, contributing to operational disruptions and long queues. For instance, the Ajaokuta gas plant, a key supply source for some regions, reportedly has a 24-hour loading time for a full cascade of gas, which serves only a limited number of stations.¹³⁴

Operational breakdowns at existing stations further exacerbate the problem. As of the time of this report, there was no publicly available information to determine the project's status, despite the fact that the planned "Autogas Framework Operationalisation" seeks to assure smooth supply at lower inlet costs for the AutoCNG sector.¹³⁵

¹³⁰Reps caucus decries lack of CNG conversion centres in north - The Nation Newspaper, accessed June 8, 2025, <https://thenationonline.ng/reps-caucus-decries-lack-of-cng-conversion-centres-in-north/>

¹³¹Nigeria Sets N300,000 to N600,000 Cost for Petrol to CNG Vehicle Conversion, Opening Doors for Energy Sector Startups. - Startup Lagos, accessed June 17, 2025, <https://www.startuplagos.net/post-detail/nigeria-sets-n300000-to-n600000-cost-for-petrol-to-cng-vehicle-conversion-opening-doors-for-energy-sector-startups>

¹³² 5 Things You Need to Know Before Switching to CNG in Nigeria - Haul247, accessed June 8, 2025, ⁴⁹<https://www.haul247.co/resources/blog/5-things-you-need-to-know-before-switching-to-cng-in-nigeria>

¹³³Compressed Natural Gas Adoption in Nigeria: Benefits and Barriers - LightRay! Media, accessed June 8, 2025, <https://lightraymedia.org/2024/10/25/compressed-natural-gas-adoption-in-nigeria-benefits-and-barriers>

¹³⁴Nigeria: Tinubu's CNG Initiative Faces Growing Backlash Over Poor Infrastructure, accessed June 4, 2025, <https://westafricaweekly.com/nigeria-tinubu-cng-initiative-faces-growing-backlash-over-poor-infrastructure/>

¹³⁵Pi-CNG to inaugurate CNG refuelling stations in five states, Abuja April 25 | TheCable, accessed June 9, 2025, <https://www.thecable.ng/Pi-CNG-to-inaugurate-cng-refuelling-stations-in-five-states-abuja-april-25/>

The Pi-CNG is characterised by a notable imbalance: the significant price advantage of CNG over petrol has created a strong "demand-pull" from consumers eager for cost savings. However, the "supply-push" – encompassing infrastructure development, conversion capacity, and consistent gas availability – is struggling to keep pace. This mismatch, where demand outstrips the supply-side capabilities, leads to consumer frustration, long waiting times, and potentially undermines long-term confidence in the initiative if not urgently and comprehensively addressed. While the PI-CNG's acknowledgement that "queues are naturally going to rise from the estimated average of 1.5 hours" ¹³⁶ is a recognition of this demand, it must be met with an accelerated and more strategically distributed deployment of infrastructure and a robust gas supply chain.

iv. Public Perception, Safety Standards, and Regulatory Enforcement:

There remains a limited public awareness and understanding of CNG technology, its benefits, and its safe operation. Misconceptions about the safety of CNG persist, fueled in part by isolated incidents such as explosions linked to poorly executed conversions or the use of substandard equipment. This underscores the critical need for stringent safety standards and robust regulatory enforcement covering conversion kits, cylinder integrity, the quality of conversion work, and the operation of refuelling stations.

The Nigerian Gas Vehicle Monitoring System (NGVMS) was launched in mid-October and it serves as a good step in this direction as this system aims to ensure that only properly converted or inspected vehicles (with certified tanks) are refuelled at gas stations and allowed to operate, with enforcement by the NMDPRA and the Federal Road Safety Commission (FRSC).¹³⁷ The risk of substandard imported kits and components entering the market also necessitates strong vigilance from regulatory bodies like the Standards Organisation of Nigeria (SON).

v. Policy Cohesion and Implementation Gaps:

Concerns have been raised about policy inconsistency and the impact of shifting government priorities, which can create uncertainty for investors and consumers alike, potentially deterring long-term commitments. The pace of the rollout has also been a subject of criticism, with some stakeholders perceiving it as slow relative to the ambitious targets and the urgent public need for affordable fuel. The Pi-CNG has refuted claims of a slow rollout, pointing to the rapid progress from a near-zero base.¹³⁸

¹³⁶Nigeria's CNG initiative attract over \$500m investment in 2024 - PI-CNG - Businessday NG, accessed June 6, 2025, <https://businessday.ng/energy/article/nigerias-cng-initiative-attract-over-500m-investment-in-2024-pi-cng/>

¹³⁷CNG attracts \$491m investment in one year - Presidency | The Guardian Nigeria News, accessed June 11, 2025, <https://guardian.ng/news/cng-attracts-491m-investment-in-one-year-presidency/>

¹³⁸50000 vehicles converted as CNG investments hit \$500m - Punch Newspapers, accessed June 11, 2025, <https://punchng.com/50000-vehicles-converted-as-cng-investments-hit-500m/>

Issues of data management system - publicly accessible and verifiable have also surfaced, such as difficulties in verifying the exact number and location of all claimed conversion centres through official public channels.¹³⁹ Additionally, allegations of a monopolistic market structure favouring a single entity in terms of government support, funding, and import approvals have been made, raising concerns about fair competition and equitable participation, especially for businesses in Northern Nigeria.¹⁴⁰



¹³⁹Nigeria: Tinubu's CNG Initiative Faces Growing Backlash Over Poor Infrastructure, accessed June 4, 2025, <https://westafricaweekly.com/nigeria-tinubu-cng-initiative-faces-growing-backlash-over-poor-infrastructure/>

¹⁴⁰A Call for Inclusive and Equitable Implementation of the CNG Program in Northern Nigeria By Arewa Unity Forum - Weekenders Magazine, accessed June 6, 2025, <https://weekendersmagazine.com/a-call-for-inclusive-and-equitable-implementation-of-the-cng-program-in-northern-nigeriaby-arewa-unity-forum/>

Comparative Insights: Brief Lessons from Global CNG Initiatives

Nigeria's Pi-CNG is not charting an entirely new course; several countries have implemented national CNG programmes, offering valuable lessons.

- India:** India's CNG programme is one of the world's largest, characterised by aggressive promotion, especially for public transport in major cities like Delhi and Mumbai. A Supreme Court directive was a key driver for CNG adoption in Delhi's public transport, leading to over 100,000 CNG vehicles in the city within five years.¹⁴¹ Key success factors include strong government incentives (subsidies, tax rebates), a focus on environmental benefits (pollution control), a significant expansion of refuelling infrastructure (from 1,300 stations in 2018 to over 5,000 in 2024), and the rising cost of conventional fuels. However, India has also faced challenges, including inadequate infrastructure in rural areas, the high initial cost of vehicle conversion, competition from electric vehicles (EVs), and ensuring consistent fuel supply.¹⁴²
- Pakistan:** Introduced CNG in 1992, primarily to utilise indigenous gas reserves, enhance energy security, and reduce the oil import bill. Early success was attributed to supportive policies like the CNG Production and Marketing Rules of 1992, access to easy loans, and the removal of taxes and import duties on CNG equipment. However, the programme later faced a policy-driven rollback, including a ban on new CNG license issuance, which negatively impacted the market.¹⁴³
- Brazil:** The Brazilian experience underscores the importance of state-level market incentives, such as tax breaks for CNG fuel and reduced motor vehicle property taxes for CNG vehicles, which are crucial for improving the economic viability and shortening the payback period for conversions.¹⁴⁴ Consistent political will, legislative support for natural gas development, and a history of using public incentives to spur renewable energy adoption (like biofuels) have also been important.¹⁴⁵ Challenges include competition from other alternative fuels like ethanol and the impact of natural gas supply and pricing dynamics if incentives are insufficient.¹⁴⁶

¹⁴¹Successful Adoption of CNG and Emerging CNG-Hydrogen Program in India - Department of Energy, accessed June 30, 2025, https://energy.gov/sites/prod/files/2014/03/f9/cng_h2_workshop_6_pal.pdf

¹⁴²India CNG Market Size to Hit USD 52.36 Billion by 2034 - Cervicorn Consulting, accessed June 12, 2025, <https://www.cervicornconsulting.com/india-cng-market>

¹⁴³Decline in the transport emission due to CNG program. | Download Table - ResearchGate, accessed June 11, 2025, https://www.researchgate.net/figure/Decline-in-the-transport-emission-due-to-CNG-program_tbl1_260110343

¹⁴⁴Natural gas as a vehicular fuel in Brazil: Barriers and lessons to learn - ResearchGate, accessed June 8, 2025, https://www.researchgate.net/publication/360767859_Natural_gas_as_a_vehicular_fuel_in_Brazil_Barriers_and_lessons_to_learn

¹⁴⁵Brazil's blooming natural gas market: unlocking the Transition Economy - Legal 500, accessed May 26, 2025, <https://www.legal500.com/guides/hot-topic/brazils-blooming-natural-gas-market-unlocking-the-transition-economy/>

¹⁴⁶ibid

- **Argentina:** Launched its Liquid Fuels Substitution Programme in 1984 to free up oil resources for export by replacing diesel with CNG in public transport.¹⁴⁷ The government focused on maintaining favourable CNG prices through taxation of liquid fuels and established standards for CNG equipment, vehicle conversion, and fueling stations. Credit lines were provided for taxi fleet conversions in Buenos Aires. The price advantage of CNG was the strongest driver for adoption. However, the Natural Gas Vehicle (NGV) market stagnated after 2004 due to natural gas supply shortages, highlighting the criticality of supply chain integrity.
- **China:** Boasts the world's largest NGV fleet, a development driven primarily by the need to curb severe vehicular air pollution.¹⁴⁸ The "Clean Vehicles Action" programme, initiated in 1999 for several demonstration cities, set targets for alternative fuel use in bus and taxi fleets, provided R&D funding, and offered financial subsidies to buyers. Until 2015, the government regulated CNG prices to be lower than gasoline. The growth of the NGV market was also indirectly supported by significant government investment in natural gas infrastructure, such as major gas pipeline projects, ensuring gas access even to provinces without indigenous resources.¹⁴⁹
- **USA:** In the US, transit agencies have been active adopters of NGVs, driven by favourable economics. Best practices in the US transit sector emphasise frequent and thorough CNG fuel system inspections (as per Federal Motor Vehicle Safety Standard 304), comprehensive driver training on natural gas properties and emergency protocols, and detailed Standard Operating Procedures (SOPs) for maintenance and emergency situations.¹⁵⁰

For general commuters, the financial viability of CNG adoption has been found to be relatively small, even with developed infrastructure, depending heavily on factors like vehicle miles travelled, gasoline prices, and the cost differential of CNG vehicles/conversions.¹⁵¹ High initial NGV prices and lack of widespread refuelling infrastructure remain significant barriers for broader consumer adoption.¹⁵²

A common thread across successful national CNG programmes is the implementation of a comprehensive and sustained "policy package." This typically includes strong government mandates or clear targets, a suite of fiscal incentives (subsidies, tax relief, favorable loan conditions), dedicated support for infrastructure development

¹⁴⁷Pathways for Developing a Natural Gas Vehicle Market - CSIS, accessed May 25, 2025, <https://www.csis.org/analysis/pathways-developing-natural-gas-vehicle-market>

¹⁴⁸ibid

¹⁴⁹ ibid

¹⁵⁰Best Practices for Compressed Natural Gas (CNG) Engines - Valvoline™ Global, accessed June 4, 2025, <https://www.valvolineglobal.com/en/blog/partner-resources/cng-best-practices/>

¹⁵¹Compressed Natural Gas Vehicles Financially Viable Option? - ResearchGate, accessed June 7, 2025, https://www.researchgate.net/publication/309730893_Compressed_Natural_Gas_Vehicles_Financially_Viable_Option

¹⁵²Compressed Natural Gas Vehicles: Financially Viable Option? - DigitalCommons@USU, accessed May 27, 2025, https://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=2281&context=appecon_facpub

(including pipelines and refuelling stations) and data management infrastructure, mechanisms to ensure a favourable price differential for CNG compared to conventional fuels, and the establishment and enforcement of robust safety and technical standards.

Isolated strengths, such as a significant price advantage for CNG, can be undermined if other critical components of this package, like infrastructure availability or consistent gas supply, are weak or inconsistently applied. Nigeria's Pi-CNG incorporates many of these elements, but ensuring their consistent, coordinated, and robust application across all facets of the initiative will be key to its long-term success.



Strategic Policy Recommendations for an Accelerated and Sustainable CNG Transition

To build upon the current momentum and address the identified challenges, the following strategic policy recommendations are proposed to enhance the effectiveness and sustainability of Nigeria's Presidential CNG Initiative:

A. Enhancing Infrastructure Development and Equitable Access

1. **Prioritise Equitable Refuelling Infrastructure Expansion:** Develop and implement a time-bound plan to accelerate the rollout of CNG refuelling stations, with a specific focus on currently underserved geopolitical zones (especially the North-East and North-West) and major inter-state transport corridors. This plan should be publicly available and include clear regional targets.
2. **Incentivise "Virtual Pipeline" Solutions and Key Arterial Pipelines:** Provide targeted guarantees, or public-private partnership frameworks to further incentivise private sector investment in mother stations and "virtual pipeline" solutions (LNG/LCNG trucking) for remote and off-pipeline regions. Simultaneously, expedite the completion of major gas transmission infrastructure like the Ajaokuta-Kaduna-Kano (AKK) pipeline to ensure long-term, lower-cost gas supply to the North.
3. **Support Conversion Centre Proliferation in Underserved Areas:** Offer specific incentives and facilitate partnerships with state governments, technical institutions, and private entrepreneurs to establish more certified CNG conversion centres in regions currently lacking adequate capacity, ensuring national reach.

B. Improving Affordability and Incentivising Mass Adoption

1. **Expand and Streamline Conversion Subsidies:** Enhance existing subsidy programmes for vehicle conversion, ensuring they are easily accessible and beneficial not only to large fleet owners or commercial unions but also to individual private vehicle owners and small-scale transport operators. Explore mechanisms such as direct rebates at the point of conversion, a transparent voucher system, or an improved and widely accessible "convert and pay later" scheme with clear, non-onerous terms.
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2. **Facilitate Access to Affordable Finance:** Collaborate with the Central Bank of Nigeria, development finance institutions, and commercial banks to design and promote affordable loan packages specifically for CNG vehicle purchase and conversion. Consider government guarantees or interest rate buy-downs to reduce the financial burden on end-users. Mobilise investments through domestic and international sources, leveraging institutions such as InfraCorp, NSIA, BOI, Infrastructure Bank, InfraCredit, and other Infrastructure Funds. Also, explore diversified financing mechanisms via PPP, equity/debt financing, local guarantee, transition financing through the debt capital market), etc.
3. **Maintain Stable and Favourable CNG Pricing:** Ensure a significant and stable price differential between CNG and conventional fuels (petrol, diesel) through consistent fiscal policies. This could involve adjusting excise duties on petrol/diesel or maintaining concessional pricing for natural gas supplied to the CNG sector (e.g., the reported \$1.57/MMBtu price for mobility gas¹⁵³).
4. **Promote Bulk Conversion Programmes:** Encourage and support initiatives for bulk CNG conversions for large employers (public and private), cooperative societies, and residential estate associations to achieve economies of scale and wider reach.

C. Strengthening Regulatory Frameworks, Safety Protocols, and Consumer Trust

1. **Full Operationalisation and Rigorous Enforcement of NGVMS:** Expedite the full deployment and ensure strict enforcement of the Nigerian Gas Vehicle Monitoring System (NGVMS). ¹⁵⁴This system is critical for ensuring that all vehicle conversions meet stringent safety standards, that only certified components are used, and that refuelling stations only service compliant vehicles.
2. **Enhance Quality Assurance for Kits and Conversions:** Strengthen the capacity of the Standards Organisation of Nigeria (SON) and NMDPRA for robust quality assurance, market surveillance, and type-approval of all imported and locally manufactured CNG conversion kits, cylinders, and related components to prevent the influx and use of substandard or unsafe products.
3. **Mandate Standardised Technician Training and Certification:** Implement a mandatory, national, standardised curriculum and certification process for all technicians involved in CNG vehicle conversion, inspection, and maintenance. This should be regularly updated to reflect technological advancements.

¹⁵³ 2025 Nigerian CNG Industry Report - Agusto Store, accessed June 13, 2025, <https://www.agustoresearch.com/report/2025-nigerian-cng-industry-report/>

¹⁵⁴ CNG attracts \$491m investment in one year - Presidency | The Guardian Nigeria News, accessed June 11, 2025, <https://guardian.ng/news/cng-attracts-491m-investment-in-one-year-presidency/>

4. **Conduct Regular Safety Audits:** Institute a programme for regular, independent safety audits of all certified CNG conversion centres and refuelling stations to ensure ongoing compliance with operational safety standards.
5. **Intensify Public Awareness and Safety Campaigns:** Launch comprehensive and sustained public awareness campaigns using multiple media channels to educate citizens on the safety features of CNG technology, the economic and environmental benefits, proper vehicle usage, and emergency procedures. Involve credible technical experts, community leaders, and transport unions in these campaigns to build trust.

D. Deepening Public Engagement and Stakeholder Collaboration

1. **Establish a Multi-Stakeholder Advisory Council:** Create a formal advisory council for the Pi-CNG, comprising representatives from federal and state government agencies, consumer protection groups, various transport unions, private sector CNG operators (infrastructure developers, conversion companies), financial institutions, academia, and civil society organisations. This council would provide a platform for broader input, feedback, and collaborative problem-solving.
2. **Enhance Transparency and Public Reporting:** Improve transparency by regularly publishing verified, detailed, and disaggregated data on the Pi-CNG's progress. This should include figures on investments attracted, number and locations of operational/planned refuelling stations and conversion centres (by state and geopolitical zone), number of vehicles converted (by type and region), and jobs created. This information should be available on an easily accessible public platform or portal, addressing concerns about data verifiability.
3. **Ensure a Level Playing Field for Gas Infrastructure Developers, Infrastructure Sponsors or Market Players:** Actively investigate and address any concerns or allegations regarding market dominance, monopolistic practices, or preferential treatment in the allocation of support, licenses, or approvals. Foster an environment of fair competition to encourage broader participation and innovation.

E. Ensuring Policy Stability and Fostering Local Content

1. **Guarantee Long-Term Policy and Regulatory Certainty:** Provide clear, consistent, and long-term policy and regulatory frameworks for the CNG sector to sustain investor confidence and encourage long-duration investments. Avoid frequent or abrupt policy changes that can deter private capital.

2. **Actively Promote Local Manufacturing and Content:** Develop and implement a clear strategy with strong incentives (e.g., fiscal benefits, pioneer status, access to finance, dedicated industrial parks like Ajaokuta ¹⁵⁵) to encourage and support the local manufacturing of CNG conversion kits, high-pressure cylinders (leveraging facilities like the one in Ikorodu ¹⁵⁶), dispensers, and other critical components. This will reduce import dependency, create skilled jobs, lower costs, and enhance national value addition.
3. **Integrate CNG Technology into Technical Education:** Work with educational authorities and institutions to integrate CNG vehicle technology, conversion techniques, and maintenance protocols into the curricula of technical colleges, vocational training centres, and university engineering programmes nationwide, building a sustainable domestic skills base.
4. **Promoting Circular Economy and Sustainability:** development of local capacity to manage waste streams from faulty or broken kits and metal components and deepen recycling and upcycling capacity.



¹⁵⁵Presidential CNG Initiative signs MoU with firm to expand gas-powered transport, accessed June 7, 2025, <https://smallbusinessinsights.ng/presidential-cng-initiative-signs-mou-with-Ing-arete-to-expand-gas-powered-transport/>

¹⁵⁶ FG to Roll Out 175 New CNG Stations Within 18 Months as Vehicle Conversions Surge, accessed May 21, 2025, <https://www.tv360nigeria.com/fg-to-roll-out-175-new-cng-stations-within-18-months-as-vehicle-conversions-surge/>

Conclusion: Charting the Path Forward for Nigeria's CNG Revolution

The Presidential Compressed Natural Gas Initiative stands as an essential undertaking in Nigeria's contemporary socio-economic and environmental landscape. Launched against a backdrop of fiscal adjustment and rising energy costs, the Pi-CNG holds the transformative potential to significantly alleviate the economic burden on citizens, enhance national energy security by leveraging abundant domestic gas resources, create substantial employment opportunities, and steer the nation towards a cleaner transportation future.

The progress achieved within a relatively short timeframe, especially in attracting investment, rapidly expanding the network of conversion centres from a minimal base, and initiating the conversion of tens of thousands of vehicles, is commendable and signals a strong market appetite for CNG as a viable alternative to conventional liquid fuels.

However, the journey towards a fully realised CNG revolution is fraught with challenges that demand unwavering attention and strategic intervention. Persistent infrastructure deficits, most notably the insufficient number and inequitable distribution of refuelling stations, continue to create bottlenecks and limit widespread access. The high upfront cost of vehicle conversion remains a significant hurdle for many Nigerians, necessitating more effective and accessible financial support mechanisms.

Ensuring the integrity of the gas supply chain, maintaining robust safety standards across the entire value chain—from kit manufacturing and conversion to refuelling and vehicle operation—and building enduring public trust, underpinned by a robust data architecture, are paramount. Furthermore, the imperative for policy consistency, enhanced transparency, and the active development of local content cannot be overstated if the initiative is to achieve its long-term objectives sustainably.

The success of the Pi-CNG hinges on a multi-pronged approach characterised by sustained political will, astute and adaptive policy implementation, rigorous regulatory oversight, and dynamic public-private partnerships. The lessons from international experiences reinforce the need for a comprehensive policy package that synergises incentives, infrastructure development, pricing mechanisms, and safety protocols.

Addressing the existing disparities in infrastructure deployment across geopolitical zones is not merely an issue of equity but a prerequisite for unlocking the full national economic and social benefits of CNG adoption.

Ultimately, the Presidential CNG Initiative is more than just a fuel-switching programme; it is a critical enabler of Nigeria's broader energy transition, a catalyst for economic resilience, and a testament to the nation's commitment to harnessing its natural endowments for sustainable development. By proactively addressing the identified challenges and diligently implementing the recommended strategies, Nigeria can navigate the complexities of this transition and firmly establish CNG as a cornerstone of a more affordable, secure, and environmentally responsible energy future for all its citizens. The path forward requires continued collaboration, innovation, and an unyielding focus on delivering tangible and equitable benefits nationwide.



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The NESG is an independent, non-partisan, non-sectarian organisation, committed to fostering open and continuous dialogue on Nigeria's economic development. The NESG strives to forge a mutual understanding between leaders of thought so as to explore, discover and support initiatives directed at improving Nigeria's economic policies, institutions, and management.

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