

# PESTEL Analysis - NFI Group

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Presented to Leonardo Amado Godoy



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# Executive Summary

This report assesses the potential of Peru as an expansion market for NFI Group Inc., focusing on evaluating market conditions, competitive advantages, and alignment with sustainability goals. Peru, with a population of 34.35 million, presents a diverse and challenging environment, yet offers promising opportunities for NFI's zero-emission vehicles due to the country's varied geography and commitment to reducing greenhouse gas emissions by 30-40% by 2030.

The PESTLE analysis for NFI Group in Peru reveals significant opportunities and challenges. Politically, Peru's commitment to the Paris Agreement supports NFI's zero-emission buses, but political instability may disrupt agreements. Economically, stable GDP growth and low inflation offer potential for public sector contracts. Socially, growing environmental awareness presents demand, though inequality and transport mafias may hinder progress. Technologically, investment in smart cities and innovation is promising, but unequal access to technology poses challenges. Environmentally, Peru's carbon neutrality goals align with NFI's hydrogen buses. Legally, supportive regulations and trade agreements facilitate NFI's market entry, though risks remain.

NFI Group's SWOT analysis highlights strengths in global experience, cost efficiency, and a diverse product range, particularly in zero-emission buses. However, challenges include declining performance and vulnerability to economic downturns. Opportunities lie in the growing demand for sustainable transportation and global market expansion. Threats include intense competition, exchange rate fluctuations, and supply chain risks. Recommendations include investing in zero-emission technology, expanding globally, improving operational efficiency, fostering innovation, diversifying the supply chain, engaging with municipalities, and positioning NFI as a sustainability leader while focusing on talent development and retention.

In conclusion, Peru presents favorable conditions for NFI to expand its business. The alignment between Peru's sustainability goals and NFI's zero-emission offerings, coupled with the market's potential for bulk orders and open manufacturing policies, offers a reliable base for NFI's growth. Success will depend on leveraging NFI's strengths while carefully managing financial and external risks.

# Introduction



## Bienvenido a Perú

Peru, the third largest country in South America, is a popular tourist destination thanks to its great cultural heritage. With a population of 33 million inhabitants and its capital, Lima, as the main urban area with 10.9 million inhabitants, the country stands out for its linguistic and ethnic diversity. The country's official languages include Spanish, Quechua and Aymara, reflecting a strong indigenous heritage, and the predominant religion is Catholicism (Statista, 2023).

Peru's cultural diversity is one of the country's greatest attractions and treasures, which can be identified through its music, dance, gastronomy, popular art, ancestral festivities, traditional textiles and even the use of natural medicines. The country's cultural expressions enrich the identity of all Peruvians (Peru Travel, 2022).

# 1. Political

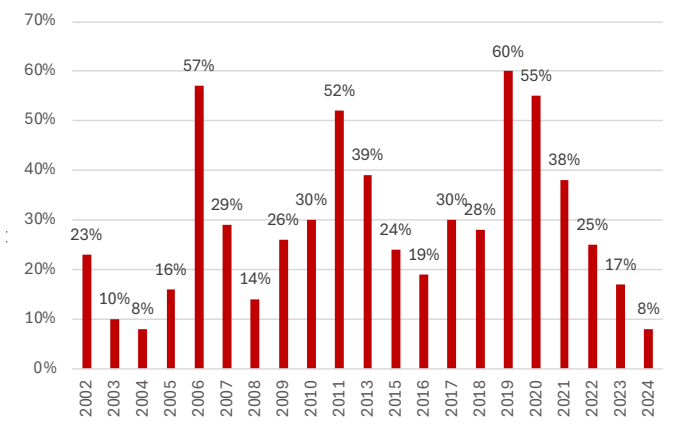


Figure 1. Presidential Approval Rate From Statista, 2024.

## 1.1 Paris Agreement - 2015

Peru is one of the countries most affected by climate change. For this reason, it is one of 196 nations that signed the Paris Agreement at the 2015 United Nations Climate Change Conference. Peru's primary commitment under this agreement is to reduce greenhouse gas emissions by 30% by 2030, aiming for up to a 40% reduction with international support. Additionally, Peru has pledged to transparently report its climate related measures, progress made, and any support received or provided in combating climate change (United Nations - Climate Change, 2024).

## 1.2 Political Instability in Peru

Peru has experienced significant political challenges and changes in government. In the last eight years, the country has had seven presidents

due to Peru's undemocratic constitution, which was established under Alberto Fujimori in 1993 and gives Congress the power and authority to remove presidents if two-thirds of the members vote in favour and declare the president immorally unfit to fulfill his role. (Foulkes, 2022).

Furthermore, as shown in Figure 1, presidential approval ratings in Peru have been consistently low since 2002, with approval being more than 50% in only four years. In 2024, President Dina Boluarte recorded the lowest approval rate of any Peruvian president at 8%, matching the 8% approval rate of Alejandro Toledo's presidency in 2004 (Statista, 2024).

## Business Implications

- Peru's climate agreement supports NFI Group's electric buses, promoting greenhouse gas reduction and cleaner transport.
- International collaboration could expand NFI's opportunities in the clean transportation market.
- Political instability and shifting priorities may risk long-term agreements and timely zero-emission bus delivery.



## 2. Economic

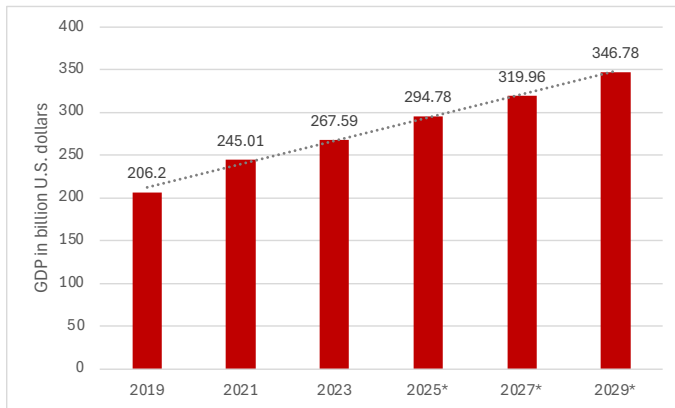


Figure 2. GDP of Peru. Statista 2024.

### 2.1 Peru's GDP

Peru has experienced consistent GDP growth, apart from 2020 and 2021 due to the Covid-19 pandemic. However, the country's economy remains strong and is projected to continue growing in the coming years. As shown in Figure 2, in 2023, Peru's GDP reached approximately 267.59 billion USD, showing its economic potential (Statista, 2024).

### 2.3 Peru: Inflation Rate

Peru has maintained low inflation rates over the years, with exceptions in 2021, 2022, and 2023, which can be attributed to global increases triggered by the pandemic. As shown in Figure 3, inflation in Peru is forecast to decrease by a total of 0.5 percentage points between 2024 and 2029 but is projected to rise back to 2 percent in 2029.

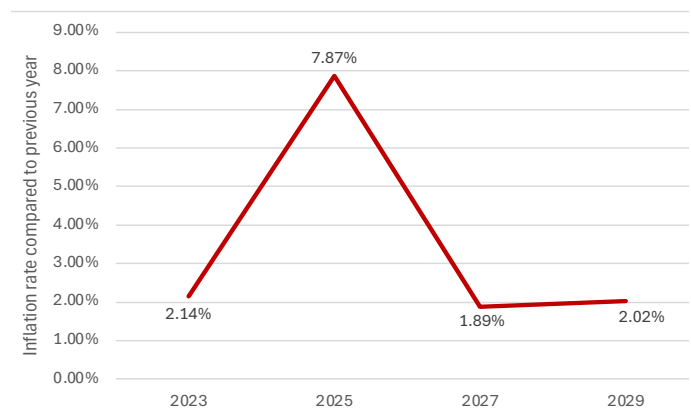


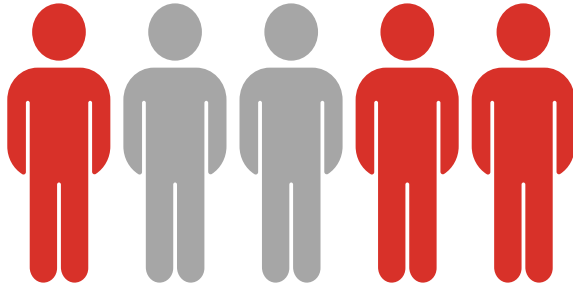
Figure 3. Inflation Rate of Peru. Statista 2024.

The International Monetary Fund attributes these fluctuations to annual changes in the consumer price index (Statista, 2024).

## Business Implications

- Stabilizing inflation in Peru could allow for better cost planning, enabling government budgets for NFI Group's buses.
- Stable inflation supports longer-term contracts, fostering predictable partnerships for NFI Group.
- Consistent GDP growth in Peru boosts purchasing power, offering NFI Group opportunities with public sector clients interested in zero-emission buses.

# 3. Social



70% of the population acknowledge the impact of climate change in their daily lives.

## 3.1 General Overview and Cultural Diversity:

Peru, South America's third-largest country with a population of 33 million, is renowned for its cultural heritage, including music, dance, gastronomy, and textiles. The capital, Lima, is home to 10.9 million people. Official languages include Spanish, Quechua, and Aymara, reflecting the country's rich indigenous heritage (Statista, 2023; Peru Travel, 2022).

## 3.2 Social Inequality and Economic Challenges:

Peru faces significant inequality, with the middle class shrinking from 60% in 2019 to 47% in 2023, exacerbated by rising poverty and criminality. Despite government efforts, income redistribution remains limited, and regional disparities are stark, such as the high infant mortality rate in rural Puno compared to Lima (IPE, 2024; IDE-

HPUCP, 2023).

## 3.3 Transportation Issues and Environmental Awareness:

Transportation mafias and extortion have become widespread, with strikes and violent incidents affecting public sentiment and government response (El País, 2024). At the same time, environmental awareness has grown, with over 70% of Peruvians acknowledging the impact of climate change on their daily lives, although only 42% recognize commitments to address it (CEPLAN, 2023).

## Business Implications

- Peru's large population and urban centers, especially Lima, offer a strong market for NFI's transport solutions.
- Socio-economic inequalities and a shrinking middle class may limit demand for electric buses.
- Rising criminality and transport mafias challenge new mobility solutions, while environmental awareness creates opportunities for sustainable tech.

# 4. Technological



Proposed Investment of \$62.4 Million into the technology sector by the Government.

## 4.1 General Overview

Peru has built a solid foundation for technology and innovation with key public organizations like Sinacti, POLCTI, and Concytec. These institutions aim to make science and technology central to the country's economic and social growth, fostering an environment conducive to innovation and research. In 2025, the government will invest \$62.4 million in the technology sector, focusing on cloud adoption, smart cities, and advanced data analytics to boost efficiency, improve urban mobility, and support business competitiveness.

## 4.2 Cloud and Digital Transformation:

The Peruvian government plans to promote the cloud to modernize businesses, reduce costs,

and improve market adaptability. This initiative is part of the broader push to enhance business efficiency and competitiveness.

## 4.3 Smart Cities and Advanced Analytics:

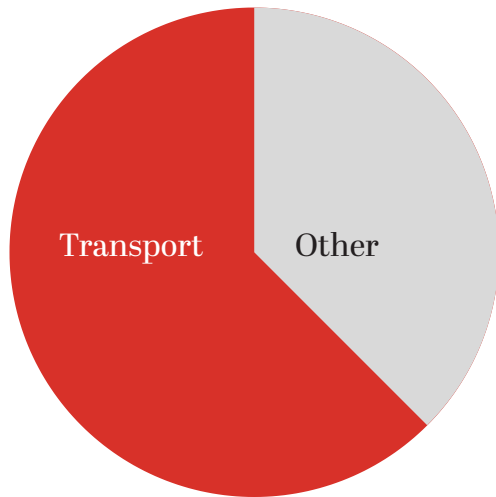
The implementation of Smart Cities will improve urban mobility, energy management, and environmental sustainability. Additionally, advanced data analytics will help businesses make informed decisions and improve operations, benefiting sectors like commerce, banking, and healthcare (Concytec, 2024; Energía Estratégica, 2024).

## Business Implications

- The focus on smart cities and urban mobility increases demand for NFI Group's electric buses.
- Cloud technology and data analytics drive operational efficiency, creating demand for advanced transportation systems.
- Inequality in technology access and the need for skilled labor may limit growth in rural areas and hinder adoption.



# 5. Environmental



55% of Pollution comes from Transportation

## 5.1 General Overview

Peru faces critical environmental issues, including water pollution, soil erosion, urban pollution, and deforestation. The Ministry of Environment is tightening regulations to reduce pollution in major cities. While Peru's greenhouse gas emissions account for just 0.4% of global emissions, the country is taking significant steps to lower its impact (FocusEconomics, 2024).

## 5.2 Greenhouse Gas Reduction Goals:

Peru aims to reach carbon neutrality by 2050 and limit emissions to 209 million tons of CO<sub>2</sub> equivalent by 2030. Aligned with its Nationally Determined Contributions (NDCs) under the UNFCCC, Peru prioritizes low-emission initiatives in sectors like transportation, demonstrating a strong commitment to sustainability (Peru

Climate Change Country Profile, 2024).

## 5.3 Support for Natural Infrastructure and Resilience:

Peru's climate resilience strategy includes the USAID-supported Natural Infrastructure for Water Security (NIWS) project, which focuses on natural solutions for water and climate resilience. Through public-private partnerships, the government supports green infrastructure, clean tech, and climate-smart agriculture, fostering both economic growth and long-term environmental benefits [(Peru Climate Change Country Profile, 2024).

## Business Implications

- Peru's climate goals and green initiatives make it a promising market for NFI's low-emission hydrogen buses, with potential funding and partnership opportunities.
- NFI should assess infrastructure readiness and long-term profitability to position Peru as a key market for sustainable transit.

# 6. Legal



Peru's free trade agreement with Canada has boosted exports by 44%

## 6.1 National Transportation Regulations

Peru's national transportation regulations, under Law No. 27181 (General Law of Transportation and Land Transit), establish technical, legal, and operational standards for both public and private transportation. These regulations define the requirements for operators to secure necessary authorizations and ensure compliance with safety and operational standards (SUTRAN, 2020).

## 6.2 Labor Rights and Employer Obligations

Employers in Peru are required to uphold essential labor rights, including minimum wage, holiday bonuses, 30 days of paid vacation, a 1-hour meal break, and compensation for time of service (CTS). Additionally, maternity leave and social and risk insurance are mandated to protect

workers' health and well-being, particularly regarding occupational illnesses (MAPFRE, 2018).

## 6.3 Electric Vehicle Infrastructure and Trade Relations

Peru's Supreme Decree No. 036-2023-EM supports electric vehicle infrastructure, advancing cleaner transportation and sustainability (Energía Estratégica, 2024). The Free Trade Agreement with Canada, active since 2009, boosts trade and investment, driving a 44% rise in Peruvian exports (Peru Trade Agreements, 2024).

## Business Implications

- Peru's regulations support transportation formalization and electric technology, aligning with NFI Group's strategy.
- Clear legal conditions and EV infrastructure promote NFI's market entry and bus expansion.
- The Canada-Peru Free Trade Agreement enhances NFI's export and investment opportunities, driving demand for sustainable transport.

# S.W.O.T Analysis

Strenght	Weakness
<ul style="list-style-type: none"> <li>• NFI's global reputation &amp; experience in transportation (NFI Industries, n.d).</li> <li>• NFI's diversified transport range (NFI Group, n.d).</li> <li>• Peru's conducive economy for NFI to thrive adequately (Statista, 2024).</li> <li>• Several favorable laws &amp; regulations for green transport (Energía Estratégica, 2024).</li> <li>• Peru's enviromental awareness and gear toward climate safety (CEPLAN, 2023).</li> <li>• Long-term profitability of adopting greener transportation (Ratnu, 2023).</li> <li>• Long term sustainability of adopting greener transportation (Ratnu, 2023).</li> </ul>	<ul style="list-style-type: none"> <li>• Peru's projected increase in inflation rate by 2029 (Statista, 2024).</li> <li>• Reliance on specific infrastructure for sustainable transportation to run efficiently (Logisber, n.d).</li> <li>• Sustainable transportation logistics may be significantly complex to manage (AMCS, 2024).</li> </ul>
Opportunity	Threath
<ul style="list-style-type: none"> <li>• Growing global demand for electric and zero-emission vehicles (World Economic Forum, 2022).</li> <li>• Peru's openness to adapt to technology (Sherlock Communications, 2024).</li> <li>• Transportation strikes recorded in October 2024 providing gaps for NFI to fill (El País, 2024).</li> <li>• Potential for green transport bulk orders in certain Peruvian municipalities (Sherlock Communications, 2024).</li> </ul>	<ul style="list-style-type: none"> <li>• Instability of Peruvian government potentially leading to shifting policies and agreements (Foulkes, 2022)</li> <li>• NFI faces intense competition from sustainable transportation rivals such as Einride and Amtrak (Neklason, 2023)</li> <li>• May face challenges with supply chain and procurement of raw materials</li> </ul>

# SWOT Recommendations

The data from the SWOT Analysis shows that NFI has significant strengths due to its global reputation and years of expertise in the sustainable transportation sector, as well as its comprehensive transport range. Research conducted not only shows that the Peruvian economy is suitable for NFI's expansion but also the Peruvian government's acute awareness of climate safety as well as their laws and regulations provide a smooth landing for NFI as these allow for sustainable transportation to thrive in the country. (Energía Estratégica, 2024).

Despite this, the NFI Group expansion to Peru faces weaknesses as the inflation rate in Peru is expected to rise in 2029, following research conducted by Statista. (Statista, 2024). In addition to this, it is important to note that sustainable transportation requires very specific infrastructure to run efficiently which Peru may not have and can be significantly complex to manage. (AMCS, 2024).

Asides from the general demand for sustainable transportation globally, the NFI's

expansion to Peru presents several opportunities as the country has severally reiterated its openness to innovation and technology alongside their commitment to reducing their carbon emissions by 2050 (Peru Climate Change Country Profile | Climate | U.S. Agency for International Development, 2024). More importantly, transportation unions in Peru recently underwent two strikes in October 2024, thereby prompting the Peruvian government to declare a 60-day state of emergency. (El País, 2024). It is obvious that this situation provides a perfect opportunity for the NFI to step in and resolve the transportation crisis that the people of Peru are currently facing.

Furthermore, the NFI Group may face some threats due to the instability in the Peruvian government, which may affect certain laws, trade agreements, policies and even procurement of certain raw materials. Also, It is imperative to keep in mind that irrespective of the NFI's reputation and expertise in sustainable transportation, it still faces stiff competition from rival giants such as Einride and Amtrak.

# Conclusion

As one of the most populous South American countries, Peru lives up to its name. The country is blessed with a diverse population and several national languages under their belt.

The economy in Peru has been relatively stable in recent years, except for the global post pandemic impact, while the laws and regulations governing Peru have been enacted to adapt to technological advancements and climate change, adequately reflecting the times that we are in. Peru's social environment is not left out as the country is characterized by a rich and deep culture but unfortunately suffers from an imbalance in the equality of its middle-class citizenry.

Nevertheless, from the research gathered for this report, it is noted that the Peruvian government are forward thinking and receptive to change which is a welcome development. The country is seen to value its reputation at home and abroad and is constantly striving to provide a better future for its citizens.

**Recommendations for The NFI Group**  
After careful review of all our findings, it is evident that Peru presents the NFI with several

opportunities for its expansion – from the Peruvian government's receptiveness to adopting technology and reducing their carbon emissions by 2050, to the October 2024 transportation strike actions by Peruvian transport unions.

In addition to these strengths, Peru provides the NFI with growth opportunity as they get to solve the current transportation crisis in Peru, following the October 2024 transportation strikes. Notwithstanding of the pros, it is imperative that the NFI takes the proposed 2029 increase in inflation into account and assess how this will affect the company and its operations whilst keeping the instability of Peru's government in mind seeing as government instability can affect trade agreement and policies, ultimately affecting NFI's business operations.

Overall, it is strongly recommended that the NFI considers expansion into Peru as there are several compelling evidence based on extensive research into Peru's PESTEL and SWOT analysis that backup this move and point towards the NFI's potential successful operations there. Additionally, the NFI may also conduct competitor research into rival sustainable transport giants like Einsride and Amtrak for benchmarking purposes.

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