

INFOCARD ELANBiz Electromobility¹

Last updated: March 2021

For additional information, use our [Ask the Expert](#).

**The purpose of this infocard is to provide some key aspects on
electromobility in Peru**

Introduction: Challenges and Importance of Electromobility in Peru

Although the development of electromobility is still in its first stages in Peru², this subsector presents great prospects for expansion and associated business opportunities. Indeed, Peru seeks to strengthen the country's four priorities oriented towards carbon neutrality by 2050: (i) the transformation of the energy matrix towards renewable energy, (ii) the electrification of the economy through less polluting transport and electromobility, (iii) promoting the circular economy (giving new value to waste) and (iv) solutions based on the responsible (sustainable) use of natural resources³.

Thus, electromobility is conceived, by the Peruvian government and companies, as (i) a means of action for the fight against climate change; which translates into (ii) specific actions by public authorities and (iii) public-private initiatives.

(i) Electromobility and Climate Change

Currently, the Peruvian government's actions to promote electromobility are part of the national efforts for sustainable development and the fight against climate change. Electromobility constitutes a privileged mitigation policy to meet Peru's commitments regarding the reduction of greenhouse gases. At the 2020 Climate Ambition Summit, President Sagasti announced that Peru will increase its ambition to "reduce carbon emissions from 30% to 40% by 2030, with the firm prospect of becoming a carbon neutral country by 2050"⁴.

¹ The information contained in this infocard is only general. For more detailed info and commercial promotion events, as well as possible business contacts, please contact the Commercial Offices of the Member States and the bilateral Chambers in Lima.

² See <http://forseti.pe/periodico/articulos/electromovilidad-en-el-peru-estamos-avanzando/#:~:text=En%20el%20ordenamiento%20jur%C3%ADdico%20peruano,al%20desarrollo%20de%20su%20vida%E2%80%9D>

³ <https://www.gob.pe/institucion/minam/noticias/303816-peru-se-pone-a-la-vanguardia-en-la-accion-climatica-con-su-registro-nacional-de-medidas-de-mitigacion-de-gases-de-efecto-invernadero>

⁴ [Perú incrementa su ambición climática para reducir en 40 % sus emisiones de carbono hacia el año 2030 | Gobierno del Perú \(www.gob.pe\)](#)



On the other hand, it should be noted that electromobility allows the reduction of other polluting gases and noise, so its massive implementation would improve people's quality of life.

In this regard, since 2018 the Ministry of Environment (MINAM) is overseeing the multisectoral response to help implement policies which contribute to sustainable development and clean energy production, thus contributing to the national goals of reducing CO2 emissions by 2030⁵. As part of the international commitments adopted by Peru, the Ministry of Energy and Mining launched the **National Appropriate Mitigation Policies (NAMA)** project for the energy sector⁶. One of these commitments is aimed at "*promoting the development of public policies which establish mechanisms that allow the widespread use of sustainable energy technologies, through the massification of electric vehicles*".

(ii) Specific Actions to Increase Electromobility

The Peruvian government amended the National Vehicle Regulation (RNV), through [Supreme Decree N° 019-2018-MTC](#), with the aim of integrating new technologies, **such as electric vehicles and hybrid vehicles**, into the automotive fleet. Along the same lines, through [Supreme Decree N° 022-2020-EM](#), the Ministry of Energy and Mining passed provisions in order to implement charging infrastructure and electric power supply, for electric mobility.

In terms of specific projects, in recent years there have been several public-private collaboration projects focused directly on the transition to electric vehicles, such as **electric buses**⁷ in certain districts of the capital, the electrification of mobile units for mining activities (heavy-duty trucks)⁸ and the implementation of **electric "motorcycle cabs"**⁹.

(iii) Public-private Initiatives

In recent years, the development of the electromobility subsector has been focused on the implementation of pilot projects based on agreements between private sector companies and local

⁵ [Perú apuesta por la electromovilidad para hacer frente al cambio climático | Gobierno del Perú \(www.gob.pe\)](#)

⁶ <http://namasenergia.minem.gob.pe/es-pe/pagina/que-es-una-nama>

⁷ <https://engie-energia.pe/historias/engie-pone-en-circulacion-primer-bus-electrico-en-lima>

⁸ <https://elgasnoticias.com/antamina-ferreyros-pone-en-operacion-la-primera-flota-de-camiones-electricos-en-el-peru/>

⁹ "Motorcycle-cabs" are vehicles that consist of the adaptation of a linear motorcycle to transport two people in the back in a transversal way, commonly used as public transport for short distances in economically less favored sectors of the large cities of Peru. They are also massively used in provincial cities, replacing their conventional fuel tanks with electric motors. See: <https://gestion.pe/economia/produce-iniciara-conversion-motores-electricos-mototaxis-proximo-ano-244388-noticia/>



governments¹⁰, as well as on the introduction of policies to promote its development¹¹. In terms of pilot projects, **the pioneers have been the European utilities Engie (France) and Enel (Italy)**, the latter through its Enel X division. Likewise, large companies active in sectors as diverse as telecommunications, hydrocarbons, electricity and renewable energies, which have aligned their environmental strategy with the country's goals, apply environmental footprint standards¹².

Characteristics of Electromobility Companies in Peru

Currently, some companies, mainly from the utilities and automotive sectors, are developing projects related to electromobility in the country. One of the most important is Engie, a French utility, which has developed a **pilot plan for electric buses** together with the District Municipality of San Isidro, in order to demonstrate that buses powered by electric energy are equally or more efficient than conventional buses, with the benefits of zero CO2 emissions and a significant reduction in noise.

On the other hand, the transnational energy company Enel X¹³, a subsidiary of the Italian utility Enel, the Chinese vehicle company BYD, and the cab company *Taxi Directo* have recently signed an alliance to provide **the first fleet of electric cabs in the country**¹⁴, with the aim of demonstrating that sustainability in public transportation is possible.

Concerning the luxury car segment of the market, Porsche, part of the Volkswagen Group, is the first company to introduce the Porsche Taycan model to the Peruvian market¹⁵.

Regulatory Framework and Bills

During the last few years, Peru has seen some progress in electromobility regulation, which is reflected in the following regulations:

Marco Normativo Electromovilidad	
Normas Generales	<ul style="list-style-type: none"> - Supreme Decree N° 022-2020-EM - Supreme Decree approving provisions on charging infrastructure and electric energy supply for electric mobility, - Law N° 27345 - Law for the Promotion of the Efficient Use of Energy, - Supreme Decree N° 053-2007-EM - Regulation of the Law for the Promotion of the Efficient Use of Energy. - Supreme Decree N° 181-2019-EF - Supreme Decree that modifies the Selective Consumption Tax applicable to the goods of the New Appendix IV of the Single Organized Text of the General Sales Tax and

¹⁰ <https://engie-energia.pe/historias/engie-pone-en-circulacion-primer-bus-electrico-en-lima>

¹¹ <https://gestion.pe/peru/vehiculos-electricos-emiten-norma-sobre-recargas-en-domicilios-y-grifos-nndc-noticia/>

¹² <https://huellacarbonoperu.minam.gob.pe/huellaperu/#/inicio>

¹³ <https://www.enelx.com/pe/es/resources/medios-noticias/news/ya-llego-a-lima-la-primera-flota-de-taxis-electricos>

¹⁴ <https://energiminas.com/por-seis-meses-circularan-dos-taxis-electricos-por-lima-y-callao-de-enel-x-byd-y-taxi-directo/>

¹⁵ <https://www.porsche.com/latin-america-es/peru/models/taycan/taycan-models/taycan-4s/>



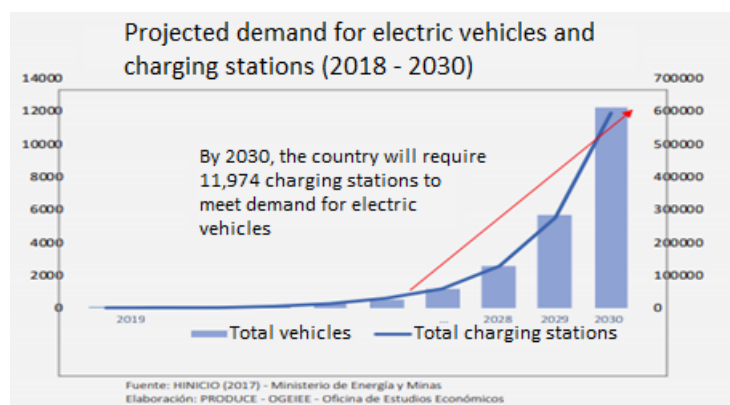
	Selective Consumption Tax Law and the Regulations of the Income Tax Law.
Bills which seek to promote a greater penetration of electromobility in Peru	<ul style="list-style-type: none"> - Bill 2182/2017-CR, which proposed the "Law that declares of national interest and public necessity the encouragement and promotion of the use of hybrid-electric vehicles and the pumping equipment necessary for their operation". - Bill 3446/2018-CR, which proposed the "Law that declares of national interest and public necessity the promotion of the use of electric vehicles (EV) or plug-in hybrid vehicles (PHEV) as well as the implementation of the appropriate infrastructure for their use".

Projected Growth in the Sector's Demand¹⁶

Based on data published in the [Osinergmin's](#) regulator's report "[The renewable energy industry in Peru: 10 years of contributions to climate change mitigation](#)", of March 2017, the transportation sector is responsible for **41.7% of total CO2 emissions at the national level**. Likewise, the same report indicates that transportation accounts for 40% of the total energy consumed in the country.

Currently, this sector consumes almost exclusively **fossil fuels** (gasoline, oil or gas). However, due to the constant changes in the perception of individuals and companies, regarding sustainability and the country's goals in relation to climate change, as well as the development of clean and sustainable energy sources, it is only a matter of time before the transportation market, both individual and massive, is fully incorporated into this energy transition.

New regulations regarding the use of clean and sustainable energies over conventional energies show that, **in the coming years, the electric vehicle fleet will increase exponentially**, due to better commercial conditions and reduced maintenance costs for individuals.¹⁷



¹⁶ <https://www.fenix.com.pe/electromovilidad-oportunidad-y-desafios-para-el-sector-energia/>

¹⁷ <https://www.greenfinancelac.org/wp-content/uploads/2020/02/MTC-Panorama-de-En-en-Peru%CC%81.pdf>

Business Potential, including Opportunities for the Provision of Specialized Components and Technical Services

Business opportunities in the electromobility sector in Peru can be found mainly in the following sub-segments:

- i) the supply of **components for electric vehicle charging stations**;
- ii) the **import of vehicles or the management of fleets** for mass transportation; and,
- iii) integration into the global value chain of **lithium batteries**, the main component of electric vehicle batteries, an aspect that is more closely related to the exploitation of this mineral, but which is worth commenting on.

With regard to **components for charging stations**, there are business opportunities for the supply of components and electrical installations necessary for their massive installation. In particular with European utilities which already have electromobility projects in the country, such as Engie and Enel.

In addition, concerning the **import of vehicles or fleets of vehicles**, urban mass transportation presents an interesting business opportunity with the recent creation of the [Urban Transportation Authority \(ATU\) of Lima and Callao](#) (the main metropolitan area of Peru, with more than 11 million inhabitants). The ATU is an entity attached to the Ministry of Transportation and Communications, whose mission is to organize and oversee urban traffic in Lima and Callao.

Although it is true that there are still no legislative tax incentives to encourage the import of these vehicles, the government is already working on the implementation of more and better policies to promote such purchases. One of such policies is the amendment of the National Vehicle Regulation¹⁸ which includes the necessary specifications so that the National Superintendence of Customs and Tax Administration (SUNAT) and the National Superintendence of Public Registries (SUNARP), entities in charge of customs control and registry of vehicles in the country, respectively, can properly incorporate the vehicles and auto parts imported or produced in the country. Another one would be Ministerial Resolution N° 250-2019-MINEM¹⁹, which authorizes the publication of the Supreme Decree that passed provisions to facilitate the development of the electric and hybrid vehicle market, and its supply infrastructure.

Likewise, the private sector is also promoting new initiatives in the area of electromobility, as is the case with Enel X²⁰, which is working on a 100% electric Pan-American corridor, Peru being one of the beneficiaries. The first network of electric charging stations in the country has already been installed,

¹⁸ <https://movelatam.org/entrada-de-vehiculos-electricos-al-peru/>

¹⁹ https://cdn.www.gob.pe/uploads/document/file/356794/RM_N_250-2019-MINEM-DM.pdf

²⁰ <https://www.enel.pe/es/conoce-enel/prensa/news/d202010-enel-x-crea-el-primer-corredor-panamericano-100--electrico.html>



with more than 40 electric charging stations nationwide. On the other hand, the Automotive Association of Peru (APP) is actively participating in and promoting the Government's National Electromobility Plan²¹, through plans and proposals for improvement that will help meet the goals set by the Plan. Currently, the APP already has an Electric Vehicle Committee²², which will be responsible for assessing the infrastructure needs of the market and will be in charge of promoting and massifying the use of electric cars in Peru, together with companies and brands that already have this technology worldwide.

Moreover, the ATU has already made the draft for Technical Specifications for the Standardization of the physical and motor characteristics of the Electric Standard Bus²³, available for comments. This document will be relevant to identify the standards and essential components for this type of mass transit vehicle.

Likewise, a business opportunity with great potential, which will grow simultaneously with the increase in the electric vehicle fleet and the sustainable energy industry in general, is **lithium production**.²⁴ Lithium is an alkaline metal characterized by being the lightest solid metal with physical properties such as high heat capacity and thermal conductivity, as well as excellent electrical conductivity, among others. Most electric vehicles are powered by lithium batteries, which are devices designed to store large amounts of electrical energy. The main attributes of these batteries are the lightness of their components, as well as their high charging capacity and durability.

In 1998, only 7% of the global demand for lithium was destined to batteries for electronic devices and electric cars, while by 2017, the total demand for lithium destined for batteries for electronics and electric cars rose to 47%: almost 50% of the total demand, taking into account that an exponential increase in the sector has not yet been seen. Thus, it is estimated that in the next 10 years the use of lithium batteries in electric vehicles will rise to 79%, from 32% in 2019²⁵.

A study conducted by the USGS and Deutsche Bank showed a projection of lithium use by 2025, which shows a strong focus on the **new and large demand for lithium for electric vehicles**.²⁶

²¹ <https://aap.org.pe/aap-propone-modernizar-transporte-publico-con-buses-electricos-y-exonerar-de-igv-a-vehiculos-ecoamigables/>

²² <https://automundo.pe/aap-presenta-nuevo-comite-de-vehiculos-electricos/>

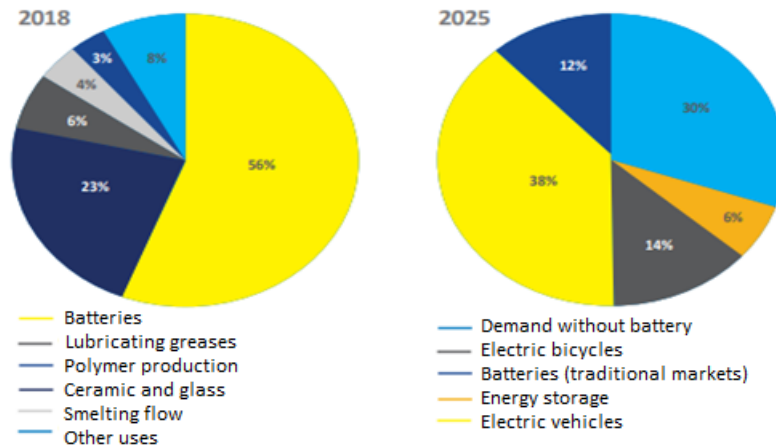
²³ "Draft of Technical Specifications for the Standardization of the Physical and Motor Characteristics of the Electric Standard Bus" <https://www.gob.pe/institucion/atu/normas-legales/1650948-002-2021-atu-dir>

²⁴ Electromobility, Concepts, Policies and Lessons Learned for Peru, Osinergmin, 2019
https://www.osinergmin.gob.pe/seccion/centro_documental/Institucional/Estudios_Economicos/Libros/Osinergmin-Electromovilidad-conceptos-politicas-lecciones-aprendidas-para-el-Peru.pdf

²⁵ [Litio despega en América Latina, pero no en Perú | EL MONTONERO](#)

²⁶ Graphic obtained from the book: Electromobility, Concepts, Policies and Lessons Learned for Peru, Osinergmin, 2019
https://www.osinergmin.gob.pe/seccion/centro_documental/Institucional/Estudios_Economicos/Libros/Osinergmin-Electromovilidad-conceptos-politicas-lecciones-aprendidas-para-el-Peru.pdf

Graph 12-2
Use of lithium (2018 and projection for 2025)



Fuentes: USGS (2019) y Deutsche Bank (2016). Elaboración: GPAE-Osinergmin.

Given this increase in demand, lithium production will increase steadily in the future, which translates into a great opportunity for the development of this stage of production, which not only influences the extraction of the material, but also the entire production chain. Although Chile, Argentina and Bolivia have a portfolio of lithium projects and a greater potential for the development of this industry than Peru, the country also has an interesting potential, especially in the Puno region where lithium production will start in 2023 (Falchani Project²⁷).



Fuente y elaboración: European Metals/ Investing News²⁷.

From: [Electromobility. Concepts, Policies and Lessons Learned for Peru. Osinergmin, 2019](#)

Other Business Opportunities with Local Governments

As previously indicated, Engie initiated a pilot plan for electric buses in agreement with the district municipality of San Isidro. This type of agreement could be replicated with other **local governments**,

²⁷ [En el 2023 comenzarán a producir toneladas de litio en Puno lrsd | La República \(larepublica.pe\)](#)

district, provincial or regional municipalities or with the aforementioned **ATU**, for the **mass introduction of electric vehicles in the national market through public transportation**. Likewise, the association through agreements with municipalities and local governments could be well received due to the **enormous deficiencies in mass public transportation** faced by the main metropolitan areas of Peru, especially Lima and Callao.

This could not only help in the goal of reducing national CO2 emissions, but would also reduce dependence on fossil fuels, of which Peru is a net importer. According to Osinermin²⁸, public transportation is the most appropriate place to start introducing electromobility. In all countries that already have a developed electric vehicle fleet, the introduction of electromobility began with public transportation, due to the benefits already mentioned, and it is through pilot projects that the benefits and improvements of this technology can be showcased.

Practical Recommendations for European Investors

- Considering that there are already European utilities developing electromobility projects in Peru (Enel, Engie), there is an opportunity for small and medium-sized European suppliers and/or service providers related to **electromobility installations**.
- With regard to automotive companies, there is an opportunity **to supply spare parts or components for their electric vehicles**. Thus, we recommend contacting European automotive groups operating in Peru, such as the Volkswagen Group, Renault, Peugeot; both to evaluate the potential for the supply of spare parts, as well as for the possibility of managing or importing fleets of vehicles for the transportation of cargo, goods, or buses for mass transportation.
- With regard to **mass passenger transportation** (especially through electric buses), we recommend **exploring strategic alliances** with **district municipalities, provincial municipalities, regional governments** that have jurisdiction over the main urban areas of the country, as well as with the Urban Transportation Authority for Lima and Callao (ATU) to develop electromobility projects.

²⁸ Electromobility, Concepts, Policies and Lessons Learned for Peru, Osinermin, 2019
https://www.osinermin.gob.pe/seccion/centro_documental/Institucional/Estudios_Economicos/Libros/Osinermin-Electromovilidad-conceptos-politicas-lecciones-aprendidas-para-el-Peru.pdf

Useful Links

- Event "E-motor 2018: Peru building the path to electromobility" - first public exhibition of electric vehicles.
<http://namasenergia.minem.gob.pe/es-pe/pagina/evento>
- Electromobility Congress 2018
<https://aap.org.pe/eventos/conferencias/participacion-en-conferencias/congreso-de-electromovilidad-2018/>
- Presentation by the Ministry of Transport and Communications at the event organized by Green Finance for Latin America and the Caribbean
<https://www.greenfinancelac.org/wp-content/uploads/2020/02/MTC-Panorama-de-En-en-Peru%CC%81.pdf>
- Electromobility, Concepts, Policies and Lessons Learned for Peru, Osinergmin, 2019 (Libro)
https://www.osinergmin.gob.pe/seccion/centro_documental/Institucional/Estudios_Economicos/Libros/Osinergmin-Electromovilidad-conceptos-politicas-lecciones-aprendidas-para-el-Peru.pdf²⁹ and its annexes available at:
<https://cdn.www.gob.pe/uploads/document/file/1306301/Anexo%20del%20libro%20%22Electromovilidad.%20Conceptos%2C%20pol%C3%ADticas%20y%20lecciones%20aprendidas%20para%20el%20Per%C3%BA.%22.pdf>

²⁹ Schedules may be found at:

<https://cdn.www.gob.pe/uploads/document/file/1306301/Anexo%20del%20libro%20%22Electromovilidad.%20Conceptos%2C%20pol%C3%ADticas%20y%20lecciones%20aprendidas%20para%20el%20Per%C3%BA.%22.pdf>

**This infocard has been prepared by the experts of the EU MAT Peru project,
which provides updated information for the ELANBiz platform.**

**If you wish to obtain more detailed
information, please contact us through our
[“Ask the Expert”](#) service.
It’s free and you will receive an answer in a
maximum of 5 business days!**

Didn't find what you need?

Ask the expert

Disclaimer

The positions expressed are those of the authors and do not necessarily reflect the official opinion of the European Union. Neither the European Union nor any person acting on behalf of the European Union is responsible for the use that might be made of this information. Neither the European Union nor the ElanBiz consortium members are responsible or may be held accountable for any loss suffered as a result of reliance upon the content of this infocard.