

## Potential Investment Projects Peru



<b>Client</b>	AFD
<b>Version</b>	01
<b>Date</b>	30/04/2021
<b>Author</b>	Andres Chaves, Verena Arauz, and Susana Ricaurte
<b>Revision</b>	Jürg Grütter and Daniel Wunderlin
<b>Contact</b>	Rte. des Esserts 92, 1854 Leysin, Switzerland <a href="mailto:jgruetter@transport-ghg.com">jgruetter@transport-ghg.com</a> , <a href="http://www.transport-ghg.com">www.transport-ghg.com</a>

## 1 Introduction

This report contains the summary of potential investment projects identified through the interviews with various stakeholders in Peru. A total of 8 potential investment projects were identified, all of them for urban buses. The interviews were conducted during December, January and February. The willingness to invest in commercial EVs is clearly given, however, for more detailed information (e.g. feasibility studies), a more formal and direct relation between actors (banks and project owners) should be established.

It is important to mention that all projects must be technically, financially, economically, environmentally, socially, gender and legally structured. The structuring of each project will contribute to an adequate allocation of risks and bankability, as well as to the deployment of innovative business models.

## 2 Urban Buses

<b>ID</b>	1
<b>City</b>	Lima - Callao
<b>Project owner (private or public)</b>	ATU Autoridad de Transporte Urbano para Lima y Callao (ATU) - (Urban Transportation Authority for Lima and Callao). Public.
<b>Degree of maturity</b>	Public bidding will be carried out by the ATU in 2022 to start operating the fleet in 2023 / 2024. To implement electric buses is just an idea, there is no studies available.
<b>Potential set-up</b>	Public Private Partnership through a Public bidding process.
<b>Name of Project</b>	Public transportation routes in Lima and Callao.
<b>General summary of the project</b>	Future public bidding to be carried out by the Urban Transport Authority for Lima and Callao (ATU) for 12 route packages pending bidding: Yellow Corridor (Panamericana), Red Corridor (Javier Prado-La Marina), Blue Corridor (Tacna-Garcilaso-Arequipa) and Purple Corridor (San Juan de Lurigancho-Brasil). Includes the entry into operation of trunk buses (18 meters) and feeder buses (12 and 9 meters) by 2023 and 2024.
<b>Timeline</b>	Year 2023: Electric articulated buses (18 high floor, with AC): 357 Electric buses (12 meters, with AC): 1,171 Electric buses (9 meters, with AC): 101 Year 2024: Electric articulated buses (18 high-floor, with AC): 79 Electric buses (12 meters, with AC): 1,264 Electric buses (9 meters, with AC): 408
<b>Barriers identified</b>	- Lack of business model structuring for the operation of electric buses, including the structuring of the public bidding.
<b>Included in Funding Proposal</b>	No

<b>ID</b>	2
<b>City</b>	Lima – Callao
<b>Project owner (private or public)</b>	Transporte Cruz de Sur/ BRT El Metropolitano. Private.
<b>Degree of maturity</b>	Private operator interested in public bidding to be carried out by the ATU in 2022. To implement electric buses is just an idea, which depends on the ATU's decision (ID 1).
<b>Potential set-up</b>	Public Private partnership with preferential interest rate. Public bidding of the ATU to give a private concession (ID 1).
<b>Name of Project</b>	Urban Public Transportation Lima – Callao. Private operator interested in participating in the future public bidding of the ATU (ID 1).
<b>General summary of the project</b>	The Urban Transport Authority for Lima and Callao (ATU) has 12 route packages to tender, and Transporte Cruz del Sur is forming a Consortium with an International Operator to participate in the future public tender to be held in 2022 for the acquisition of 100 electric vehicles (12 meters) to start operating in 2023.
<b>Timeline</b>	Year 2023: 100 electric buses (12 meters, with AC)
<b>Barriers identified</b>	<ul style="list-style-type: none"> <li>- Need for financing with low interest rates and terms in accordance with the investment.</li> <li>- Lack of technical assistance for the design of the operation of electric buses.</li> </ul>
<b>Included in Funding Proposal</b>	No

<b>ID</b>	3
<b>City</b>	Lima - Callao
<b>Project owner (private or public)</b>	Lima Bus International / BRT El Metropolitano. Private.
<b>Degree of maturity</b>	Implementing electric buses is a possible idea of the Concessionaire to comply with the contractual obligations. However, it is not mandatory to implement electric buses. This depends on the availability of credit at competitive rates.
<b>Potential set-up</b>	Public Private Partnership: Private operator selected under public bidding by ATU. Financing with local banks at a preferential interest rate and/or private equity.
<b>Name of Project</b>	Replacement of 80 gas articulated buses and acquisition of 100 electric buses to replace diesel buses.
<b>General summary of the project</b>	As one of the four operators of the BRT EL METROPOLITANO and as part of the obligations of the current concession contract, the concessionaire has the obligation to renew the fleet of 80 gas articulated buses that are in operation (after 10 years of operation). In addition to the obligation to renew the 80 articulated buses, the concessionaire must expand the fleet by 100 buses (12 meters). The entry of 80 electric articulated buses and 100 buses are projected for the year 2023.
<b>Timeline</b>	Year 2023: 80 electric articulated buses (18 meters, with AC) replace gas buses. 110 electric buses (12 meters, with AC) replace diesel buses.
<b>Barriers identified</b>	Same as ID 2
<b>Included in Funding Proposal</b>	No

<b>ID</b>	4
<b>City</b>	Lima – Callao
<b>Project owner (private or public)</b>	Lima Bus International / BRT El Metropolitano. Private
<b>Degree of maturity</b>	Private operator interested in public bidding to be carried out by the ATU in 2022. To implement electric buses is just an idea, which depends on the ATU's decision (ID 1).
<b>Potential set-up</b>	Public Private partnership with preferential interest rate. Public bidding of the ATU to give a private concession (ID 1).
<b>Name of Project</b>	Urban Public Transportation Lima – Callao. Private operator interested in participating in the future public bidding of the ATU (ID 1).
<b>General summary of the project</b>	The Urban Transport Authority for Lima and Callao (ATU) has 12 route packages to tender, and Lima Bus International is forming a Consortium with an International Operator to participate in the future public tender to be held in 2022 for the acquisition of 150 electric vehicles (12 meters) to start operating in 2023.
<b>Timeline</b>	Year 2023: 150 electric buses (12 meters, with AC)
<b>Barriers identified</b>	Same as ID 2
<b>Included in Funding Proposal</b>	No

<b>ID</b>	5
<b>City</b>	Trujillo
<b>Project owner (private or public)</b>	Ministerio de Transporte / Promovilidad (Ministry of Transport). Public
<b>Degree of maturity</b>	A project idea without any assistance so far. The Ministry of Transport is looking for technical assistance for the design of the Business Model for the operation of Electric Buses / Determination of User Tariffs / Determination of the sizing of Workshops and Dimensioning of the Electric Recharging Infrastructure required for the Operation.
<b>Potential set-up</b>	Unknown due to the low maturity degree of the project. Probably a Public Private Partnership might be the best set-up-.
<b>Name of Project</b>	Technical Assistance to the City of Trujillo for the Structuring of the concession of electric buses - trunk corridor in the City of Trujillo.
<b>General summary of the project</b>	A total of 46 electric articulated buses are estimated to operate on the trunk route in the city of Trujillo. Year of entry into operation 2024.
<b>Timeline</b>	Year 2024: 46 electric articulated buses (18 meters).
<b>Barriers identified</b>	<ul style="list-style-type: none"> <li>- Lack of business model structuring for the operation of electric buses, including the structuring of the public bidding.</li> <li>- Need for financing with low interest rates and terms in accordance with the investment.</li> <li>- Lack of technical assistance for the design of the operation of electric buses.</li> </ul>
<b>Included in Funding Proposal</b>	No

<b>ID</b>	6
<b>City</b>	Arequipa
<b>Project owner (private or public)</b>	Integra Peru SAC. Private
<b>Degree of maturity</b>	A private operator won public bidding in 2019, it has the commitment to operate electric buses.
<b>Potential set-up</b>	Financing with local banks at a preferential interest rate and private equity.
<b>Name of Project</b>	Concessioned Urban Transportation in Arequipa.
<b>General summary of the project</b>	Seeking financing for 76 buses (12 meters). Concessionaire won in 2019 the trunk route of the Integrated Transportation System of Arequipa and has the commitment to operate electric buses. Year of entry into operation 2022.
<b>Timeline</b>	Year 2022: 76 electric buses (12 meters)
<b>Barriers identified</b>	<ul style="list-style-type: none"> <li>- Need for financing with low interest rates and terms in accordance with the investment.</li> <li>- Lack of technical assistance for the design of the operation of electric buses.</li> </ul>
<b>Included in Funding Proposal</b>	Yes, for short term (2022-2023)

<b>ID</b>	7
<b>City</b>	Lima - Callao
<b>Project owner (private or public)</b>	Lima Vías Express S.A. - Grupo Express del Perú SAC / BRT El Metropolitano. Private.
<b>Degree of maturity</b>	Implementing electric buses is a possible idea of the Concessionaire to comply with the contractual obligations. However, it is not mandatory to implement electric buses. This depends on the availability of credit at competitive rates.
<b>Potential set-up</b>	Public Private Partnership: Private operator selected under public bidding by ATU. Financing with local banks at a preferential interest rate and/or private equity.
<b>Name of Project</b>	Replacement of 80 diesel articulated buses and expansion with 10 additional articulated buses.
<b>General summary of the project</b>	As one of the four operators of the BRT EL METROPOLITANO and as part of the obligations of the current concession contract, the concessionaire has the obligation to renew the fleet of 80 diesel articulated buses that are in operation (after 10 years of operation). In addition to the obligation to renew the 80 articulated buses, the concessionaire must expand the fleet by 10 articulated buses, for a total of 90 articulated buses. The entry of 90 electric units is projected for the year 2023.
<b>Timeline</b>	Year 2023 (replace diesel fleet): 90 electric articulated buses (18 meters, with AC).
<b>Barriers identified</b>	<ul style="list-style-type: none"> <li>- Need for financing with low interest rates and terms in accordance with the investment.</li> <li>- Lack of technical assistance for the design of the operation of electric buses.</li> </ul>
<b>Included in Funding Proposal</b>	No.

<b>ID</b>	8
<b>City</b>	Lima - Callao
<b>Project owner (private or public)</b>	Lima Vías Express S.A. - Grupo Express del Perú SAC / BRT El Metropolitano. Private.
<b>Degree of maturity</b>	Private operator interested in public bidding to be carried out by the ATU in 2022. To implement electric buses is just an idea, which depends on the ATU's decision (ID 1).
<b>Potential set-up</b>	Public Private partnership with preferential interest rate. Public bidding of the ATU to give a private concession (ID 1).
<b>Name of Project</b>	Urban Public Transportation Lima – Callao. Private operator interested in participating in the future public bidding of the ATU (ID 1).
<b>General summary of the project</b>	The Urban Transport Authority for Lima and Callao (ATU) has 12 route packages to tender, and Lima Vías Express S.A. is forming a Consortium with an International Operator to participate in the future public tender to be held in 2022 for the acquisition of 100 electric vehicles (12 meters) to start operating in 2023.
<b>Timeline</b>	Year 2023: 100 electric buses (12 meters, with AC)
<b>Barriers identified</b>	Same as ID 2.
<b>Included in Funding Proposal</b>	No.