

# Environmental and Social Review Summary (ESRS) Kaufmann RED Electric Buses – Chile

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## 1. General Information of the Project and Overview of Scope of IDB Invest’s Review

The proposed operation consists of financial support to Suministradora de Buses K Cuatro SpA (the “Borrower”), a subsidiary of Grupo Kaufmann (“Kaufmann” or the “Company”) and Enel X Chile, for the fulfillment of a concession contract with the Ministry of Transportation and Telecommunications (the “Project”). The concession contract obliges the Borrower to make 991 electric buses (E-buses) available for use in the Santiago de Chile metropolitan area transportation system for the duration of the fourteen-year concession period. Under the contract, the Borrower will also perform the following tasks: i) ensure the buses meet the specifications established during the tendering process; ii) train the operator’s maintenance staff and drivers;<sup>1</sup> iii) develop a maintenance plan; iv) replace the bus batteries once they no longer comply with the minimum range specification; v) overhaul each bus during the seventh year of operation or when it reaches half the mileage of its defined useful life; and vi) provide the operator with bus warranties, under which the operator may request replacement parts or repair services from the Borrower. If requested by the ministry, the Borrower must also handle end-of-life bus disposal.

For implementation of all the above-listed tasks, the Borrower will subcontract Kaufmann. The environmental and social due diligence (the “ESDD”) was centered on a review of Kaufmann’s environmental and social management system (“ESMS”) and consisted of a desk review of documents and a series of virtual interviews with the Company’s management staff. No physical visits were made due to the travel restrictions imposed by the COVID-19 pandemic.

IDB Invest conducted the ESDD in close collaboration with the International Finance Corporation (the “IFC”), a potential co-financer of the Project. Together, the two lending institutions produced similar versions of this Environmental and Social Review Summary and developed a single set of required actions for the Borrower to implement to close performance gaps encountered during the ESDD. These actions were included in a single Environmental and Social Action Plan (“ESAP”), to be attached to the Project’s legal agreements.

## 2. Environmental and Social Categorization and Rationale

The Project has been classified as a Category B operation according to IDB Invest’s Environmental and Social Sustainability Policy since it will likely generate, among others, the following impacts and risks: i) health and safety risks for workers at bus maintenance facilities; ii) labor risks at manufacturing factories in the replacement parts supply chain; and iii) risks related to storage and disposal of hazardous materials and other wastes (including used batteries) at maintenance facilities. These risks and impacts are deemed to be of low intensity.

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<sup>1</sup> Concessions for bus operation were awarded separately to different companies. The Borrower will own the buses but not operate them.

The Performance Standards (“PS”) triggered by the Project are: i) PS 1: Assessment and Management of Environmental and Social Risks and Impacts; ii) PS 2: Labor and Working Conditions; iii) PS 3: Resource Efficiency and Pollution Prevention; and iv) PS 4: Community Health, Safety, and Security.

### **3. Environmental and Social Context**

The buses supplied by the Borrower will operate throughout the Santiago metropolitan area. All Project-related bus maintenance activities will take place in Kaufmann’s existing, specialized maintenance workshops.<sup>2</sup> Contextual risks include those related to the health of workshop staff working during the COVID-19 pandemic, as well as risks related to potential social unrest such as that which was sparked by a subway fare increase in Santiago in 2019 and resulted in massive demonstrations, during which protestors set fire to buses and bus stations.<sup>3</sup>

### **4. Environmental Risks and Impacts and Proposed Mitigation and Compensation Measures**

#### **4.1 Assessment and Management of Environmental and Social Risks**

Activities associated with the Project that present environmental and social (“E&S”) risks and impacts encompass the following: i) warranty and half-life overhaul maintenance of buses; ii) procurement of replacement bus parts; and iii) final disposal of spent batteries and decommissioned buses.

##### **4.1.a E&S Assessment and Management System**

Kaufmann has in place an integrated management system (“IMS”), certified to the ISO 9001:2015<sup>4</sup> and ISO 45001:2019<sup>5</sup> standards, for identifying and addressing quality and occupational health and safety (“OHS”) risk and impacts. The scope of the IMS includes all activities related to the import and sale of vehicles and spare parts, as well as to the provision of post-sale services (e.g., vehicle maintenance and repair).

##### **4.1.b Policy**

The Borrower will establish a Project-level policy defining the environmental and social objectives and principles that guide the Project to achieve sound environmental and social performance.

##### **4.1.c Identification of Risks and Impacts**

Kaufmann’s IMS contains a formal procedure for the identification and evaluation of environmental risks and impacts. The procedure includes a protocol for categorizing and ranking the severity of all risks and impacts identified. It also defines the roles and responsibilities of the various actors involved in its implementation.

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<sup>2</sup> The operator is responsible for performing general operating maintenance.

<sup>3</sup> <https://regionalista.cl/caos-en-santiago-masivas-manifestaciones-por-alza-del-pasaje-del-metro/>

<sup>4</sup> International standard for Quality Systems.

<sup>5</sup> International standard for Environmental Management Systems.

#### 4.1.d Climate change exposure

According to the United Nations Framework Convention on Climate Change, Chile is a country that is vulnerable to climate change risks.<sup>6</sup> Nevertheless, given the nature of the activities to be carried out by the Borrower, the Project's exposure to climate change is considered low.

#### 4.1.e Management Programs

Kaufmann's IMS includes procedures for managing common wastes and for managing hazardous wastes. The Borrower will complement the latter with procedures to address labor and OHS risks and impacts specific to the workshops where bus maintenance will occur for the Project, and for monitoring compliance with local labor, environmental, health and safety laws and regulations. Furthermore, the Borrower will assign a member of its staff to be responsible for overseeing and reporting on the implementation of these and the rest of the E&S procedures applicable to the Project.

#### 4.1.f Organizational Capacity and Competency

The development and maintenance of the Company's IMS at the corporate level is handled by Kaufmann's Quality and Processes department. At the level of the maintenance workshops, oversight and implementation of the system fall to a team of qualified specialists within the OHS and Environment department. For day-to-day implementation of emergency preparedness and response measures at the maintenance workshops, Kaufmann has set up an Emergency Coordination Team at each workshop.

#### 4.1.g Emergency Preparedness and Response

Kaufmann develops procedures and plans related to emergency preparedness and response at the corporate level, covering risks such as earthquakes, fires, and hazardous substances spills. Each individual maintenance workshop receives tailored version of these plans and procedures, and the workers there are trained in their implementation according to a systematized schedule. Training includes drills—covering emergencies (e.g., fire evacuation) as well as accidents (e.g., oils spill cleanup). Workshops are outfitted with fire extinguishers (powder and CO<sub>2</sub>), and spill containment and cleanup kits, and workers are systematically trained in their proper use. The Borrower will provide IDB Invest with a copy of the emergency preparedness and response plan that identifies and addresses the emergency risks specific to the facilities where the buses will be maintained, with the goal of protecting the health and safety of workers and surrounding communities.

#### 4.1.h Monitoring and Review

Kaufmann's environmental and OHS performance is monitored by three governmental authorities: the Regional Ministerial Secretary of Health ("SEREMI" for its acronym in Spanish); the Labor Directory (*Dirección de Trabajo*); and the Ministry of Environment. The Company reports to these authorities and is

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<sup>6</sup> Chile meets 7 of the 9 predefined vulnerability characteristics, as it is a country with: (i) low lying coastal areas; (ii) arid and semi forest deterioration; (arid areas, areas with forest cover and areas exposed to iii) areas prone to natural disasters; (iv) areas exposed to drought and desertification; (v) areas of high urban air pollution; (vi) areas of fragile ecosystems, including mountain ecosystems; and (vii) an economy heavily dependent on income generated from production, processing and export of fossil fuels and associated energy the intensive products, or from their consumption (CONAMA, 2008: 13).

subjected to scheduled and unscheduled audits by them on a range of regulatory compliance matters. These include, for example, adherence to COVID-19 regulations, proper distribution and use of personal protective equipment, and the proper supply and maintenance of fire extinguishers, among others. Furthermore, in order to maintain its ISO certifications, Kaufmann undergoes annual maintenance audits as well as an extensive renewal audit every three years by the certification company SGS. The Borrower will provide performance reports to IDB Invest annually, summarizing the implementation of the IMS at the maintenance workshops.

#### 4.1.i Stakeholder Engagement

As part of the tendering process for the concession, the Technical Secretary for Strategy and Planning (“TSSP”) at the Ministry of Transportation and Telecommunications (“MTT”) implemented a Citizen Participation Plan.<sup>7</sup> The plan’s objective was to gather feedback from the transportation system’s users and incorporate it into the bidding guidelines and rules. It was operational from April to November 2016, during which time stakeholders were able to participate through three modalities: a dedicated webpage ([www.tuparada.cl](http://www.tuparada.cl)); 22 regional meetings (“*encuentros zonales*”), which involved direct dialog with the relevant transportation authorities; and “*Bus Centro*” – a bus that was outfitted to collect user feedback in the field, including in Santiago’s most remote neighborhoods. In November 2016, more than 10,000 participants attended the final regional meeting in the *Estación Central* community. The following month at the final consultation event, the MTT provided feedback as to how the agency took into account the feedback that it had gathered.

#### 4.1.j External Communication and Grievance Mechanisms

Kaufmann has not yet developed an external communication procedure or a process by which to receive and process feedback from potentially project-affected communities. To receive and facilitate resolution of any concerns or grievances regarding environmental or social performance at the workshops where bus maintenance will be performed, the Borrower will develop a community grievance mechanism, including specific provisions for reaching and responding to vulnerable populations, and share its details with the surrounding communities.

#### 4.1.k Ongoing Reporting to Affected Communities

The Borrower will provide periodic reports to the communities near the workshops where bus maintenance will be performed. The reports will describe the implementation of the Project’s E&S plans and procedures relevant to mitigating the risks and impacts to those communities (e.g., the Emergency Preparedness and Response Plan, the community grievance mechanism, and the hazardous materials and waste management plans).

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<sup>7</sup> A document containing a description of the plan can be found on the TSSP’s website:

## 4.2 Labor and Working Conditions

The Borrower will institute a human resources policy and procedures. It will also perform a comprehensive identification of the OHS risks specific to the workshops where Project-related bus maintenance will occur and ensure that Kaufmann has in place procedures for mitigating each risk identified.

Chile is a signatory to International Labor Organization (“ILO”) Convention 105. Consequently, its legislation prohibits child labor, except for minors between the ages of 15 and 18 performing certain types of light work, provided that all of the following conditions are met: (i) the proposed tasks are not harmful to their health or their physical or mental development; (ii) their parents, relatives or guardians have authorized them to work; (iii) the proposed work does not interfere with their studies; (iv) the number of hours worked does not exceed 30 per week, if the minor in question is studying; and (v) working hours do not exceed 8 hours at any time. Chile has also ratified ILO Convention 105. Accordingly, its legislation prohibits forced or unpaid labor, as well as discrimination against workers based on race, skin color, sex or sexual orientation, ancestry, marital status, religion, political participation, and nationality, among others.

### 4.2.a Supply Chain

The buses for the Project will be produced by Foton International Trade Co., an international commercial vehicle manufacturer. The battery supplier, Contemporary Amparex Technology (“CATL”), has supply chain management policies and procedures to protect against the use of child and forced labor. Kaufmann will institute a sourcing policy and develop a supply chain management procedure to mitigate these risks broadly throughout its supply chain.

## 4.3 Resource Efficiency and Pollution Prevention

### 4.3.a Pollution Prevention

Project-related activities that could generate pollution are limited to bus maintenance (warranty and half-life overhaul), battery replacement, and disposal of decommissioned buses. Kaufmann’s IMS includes formal procedures for managing both hazardous and non-hazardous wastes produced at the Company’s maintenance facilities.

Hazardous wastes there are typical of the automotive repair industry, and include used lubricants and oil filters, empty paint and solvent containers, used automotive batteries, soiled rags, and broken bus parts containing heavy metals or contaminated with fuels or lubricants; non-hazardous wastes include cardboard boxes and other domestic wastes. The waste management procedures include roles, responsibilities, and protocols for ensuring the proper storage, handling, and disposal of these wastes, and call for waste disposal to be carried out by specialized and duly permitted third parties. The Borrower, notwithstanding, will develop an additional procedure to address the safe storage and handling of non-waste hazardous materials (e.g., solvents and lubricants) at the workshops where the Project’s buses will be maintained.

The concession contract requires the Borrower to develop a plan for the responsible management of spent bus batteries. To this end, the Borrower has begun engaging with an engineering firm to analyze options for spent battery re-use. The contract also specifies that, if requested by MTT, the Borrower will handle

end-of-life bus disposal. Kaufmann will, therefore, conduct an analysis of alternative disposal options for both the used batteries and the decommissioned buses, considering the environmental and social implications of each option.

#### 4.3.b Greenhouse Gases

The project will replace 992 Diesel Euro-III buses for E-buses. By financing the implementation of E-buses in the city of Santiago, this transaction will mitigate climate change by resulting in a net reduction of greenhouse gas (“GHG”) emissions. The estimated GHG emission avoidance of the project is around 30,608.56 tons of carbon dioxide equivalent (tCO<sub>2</sub>e) per year. At the same time, the implementation of E-buses will contribute to the reduction of particulate matter (PM<sub>2.5</sub>) in approximately 16.09 t per year, compared to a scenario with the current fleet composition.<sup>8</sup>

#### 4.4 Community Health, Safety and Security

The buses supplied by the Borrower comply with various standards pertaining to bus fire safety, including the following: the European Parliament Directive 95/28/EC; the U.S. Code of Federal Regulations 49 571 – 302; the Brazilian Resolution 498/2014 CONTRAN; the Japan Safety Regulation for Road Vehicles Section 20; and the South Korea Technical Standard 11-4-7 KMVSS Section 95. Regarding risks related to the bus batteries, the Class 2 batteries included in the buses have passed a series of safety tests, including tests for resistance to the following stressors: vibration, thermal shock and cycling, fire, external short-circuits, overheating, mechanical impact, overcharge, and over discharge.

The concession contract contains a requirement for training bus operators in the general use and maintenance of the buses. The Borrower will design the training to include topics related to community health and safety—including safe driving, emergency response, and maintenance of the buses’ critical safety systems (e.g., smoke detectors and braking systems).

##### 4.4.a Security Personnel

Kaufmann contracts the international security firm ISS for the deployment of security guards for patrolling and controlling access at the Company’s facilities. In accordance with Chilean law, the security guards are not armed. Kaufmann includes in the contracts with ISS clauses obliging the security provider to comply with the pertinent laws and regulations governing this industry in Chile. The Company’s Head of Security monitors and enforces the provider’s compliance with these clauses.

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<sup>8</sup> It is estimated that in 2012 transport contributed approximately 40 percent of the city's total PM<sub>2.5</sub>, whereas in 1998 transportation emissions were estimated at 24 percent of the total urban PM production (Barraza et al., 2017). PM<sub>2.5</sub> is primarily produced by direct emissions from the combustion processes of fossil fuels. Its main sources are the processes that occur during combustion in cars, buses, and trucks (diesel and gasoline); thermoelectric plants; industrial processes; biomass combustion; residential firewood heating; agricultural burns; and forest fires.

#### 4.5 Land Acquisition and Involuntary Resettlement

The Project will not need of any kind of land acquisition, nor will it generate any kind of physical or economic involuntary displacement.

#### 4.6 Biodiversity Conservation and Natural Habitats

The project will not affect any modified, natural or critical habitats or ecosystem services.

#### 4.7 Indigenous Peoples

The Project will not generate adverse impacts on indigenous communities.

#### 4.8 Cultural Heritage

Due to its characteristics, it is very unlikely that the Project may cause any adverse effect on cultural heritage.

### **5. Local Access of Project Documentation**

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