C40 CITIES FINANCE FACILITY

Financing Models And Sources For Zero Emission Mobility Projects In Mexico

REPORT

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About the C40 Cities Finance Facility:

The C40 Cities Finance Facility (CFF) is a collaboration of the C40 Cities Climate Leadership Group and Deutsch Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. The CFF supports cities in developing and emerging economies to develop finance-ready projects to reduce emissions to limit the global temperature rise to 1.5°C and strengthen resilience against the impacts of a warming climate. The CFF is funded by the German Federal Ministry for Economic Development and Cooperation (BMZ), the Children's Investment Fund Foundation (CIFF), the Government of the United Kingdom (Department for Business, Energy and Industrial Strategy) and the United States Agency for International Development (USAID).

About the CFF in Mexico:

During its first phase, the CFF worked with Mexico City by providing technical assistance for the electrification of the Eje 8 Sur corridor. Taking advantage of this experience with Mexico City, during its second phase the CFF supported the cities of Guadalajara, Monterrey and Hermosillo, providing technical assistance to facilitate the transition to sustainable transportation systems with the deployment of zero emission buses.

Objectives

Currently, the CFF is providing direct support to two cities in Mexico – Monterrey and Guadalajara with technical assistance to accelerate the development of their zero-emission bus projects. This guide aims to raise awareness of the range of financial options in Mexico available to implement electromobility and sustainable transport projects at both the municipal and state levels.

Specifically, this document aims to achieve the following:

- Identify the actors and institutions responsible for preparing and managing different financial instruments, mechanisms and products offered by the public and private sectors.
- Compare different financial products available in Mexico focused on investment in sustainable public transport projects.
- Identify the opportunities and restrictions to implement financial solutions in Mexico, as well as the modifications of regulations and contracts for their application.

1. Introduction

Many cities in Latin America and the Caribbean have large numbers of public bus fleets with internal combustion engines, a situation that generates high levels of environmental and noise pollution. There is a real demand from cities to consider a transition to electric fleets.

However, in Mexico, 84% of state revenues come from federal sources and this generates a high dependence from local governments on them to finance their mobility projects, a significant obstacle to the adoption of electric vehicles.

Traditionally, for large mass public transportation projects in Mexico and Latin America, responsibilities —including investment needs, control, operation and maintenance—are usually distributed between the public and private sectors. Often the government directly invests in infrastructure with their own resources and, in some cases, especially when they have a public operating company, they also choose to undertake investments in the vehicle fleet. For its part, the private sector, especially through informal or formalised companies established to operate vehicle fleets, usually assumes investments in vehicle fleets, mainly using commercial or development banking as a source of financing for acquisitions. However, greater demands on and commitments by cities to improve and decarbonise public transit has highlighted the budgetary limitations to funding all improvements directly from the local budget. The higher up-front capital costs required for electric buses in comparison to conventional buses generates a challenging environment for municipal governments to finance this transition on their own.

Local governments are investigating alternative financing sources to allow them to deliver their transportation priorities. While some cities have retained their existing business model with new sources of finance, others have innovated with new business models, involving a new range of actors, both public and private.

The following diagram shows the traditional sources of funding with regards to the implementation of new transportation systems.

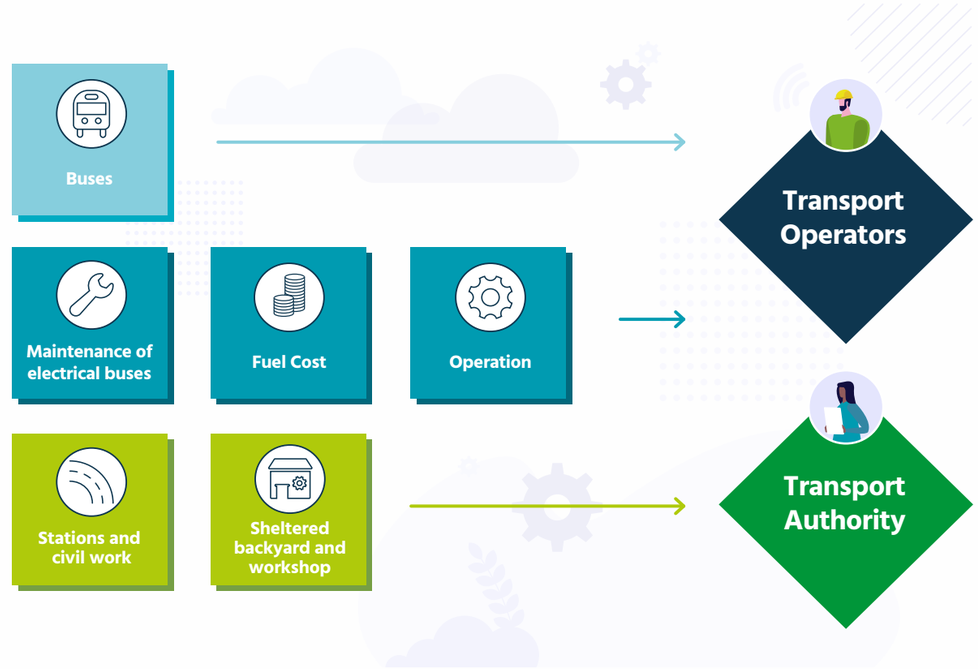


Figure 1: Traditional sources of financing

Source: Prepared by the author with information from Jorje Suárez, 2020.

In order to explore what type of business models could comprise a new zero emission bus system, Figure 2 lists the aspects that a new business model for mobility projects should include:

Type	Explanation
Investment components	• **Tangible assets:** Assets that exist in physical form. Varies dependent on technology. Examples include Land, charging stations, buildings, buses and batteries. • **Processes:** It refers to the activities that must be carried out throughout the project, for example, planning and feasibility studies, construction and installation of infrastructure, operation and maintenance of infrastructure and buses, and maintenance of batteries (in case of electric buses). • **Intangible assets:** are those goods and rights that are not physical or tangible as such, for example: security, efficient location between stations, reputation of project stakeholders, affordability.
Sources of resources	• **Revenues:** user fares, capture of yard and station land value, station and infrastructure advertising and operational savings. • **Incentives:** such as national, local, and international subsidies, fiscal and differential prices. • **Other sources:** such as resources from other areas of government, dedicated taxes, and the sale of assets and the sale/scrappage of owned assets.
Implementation Mechanisms	• **Contracts:** purchase contracts, rentals, leasing for purchase and concessions. • **Legal entities:** public, private, and mixed. • **Enabling frameworks:** plans and goals, regulations and requirements and enabling laws.
Financial products	• **Capital:** through public capital or private investors. • **Debt:** either through public or private bank loans, international loans, and bonds. • **Risk reduction:** such as contingency funds, provision contracts, risks related to foreign currency conversions and concessional financing.

Figure 2: Essential components of a business model

Taking these elements into consideration, the "Accelerating a market transition in Latin America: New business models for electric bus deployment" report states that there are five most common "archetypal" bus operator business models in Latin America (ZEBRA, 2020). These business models vary according to three components:

- Which assets are in the system (buses, terminal stops, etc.)
- Who is responsible for various aspects (ownership, operations, maintenance, scrapping)
- How these assets and activities are financed and funded.

The diagram at the bottom of this page (figure 3) describes what types of questions cities need to ask in order to characterize what type of business model can represent the best option for their new mobility project.

As cities ask themselves these questions and understand the business models available to them, this report aims to provide an overview of potential financing options and sources that Mexican cities can access as they begin to structure their new mobility projects. The following sections contain a description of all financial sources identified for zero emission mobility projects in Mexico, including public and private resources, as well as available international resources and from the development banking sector.

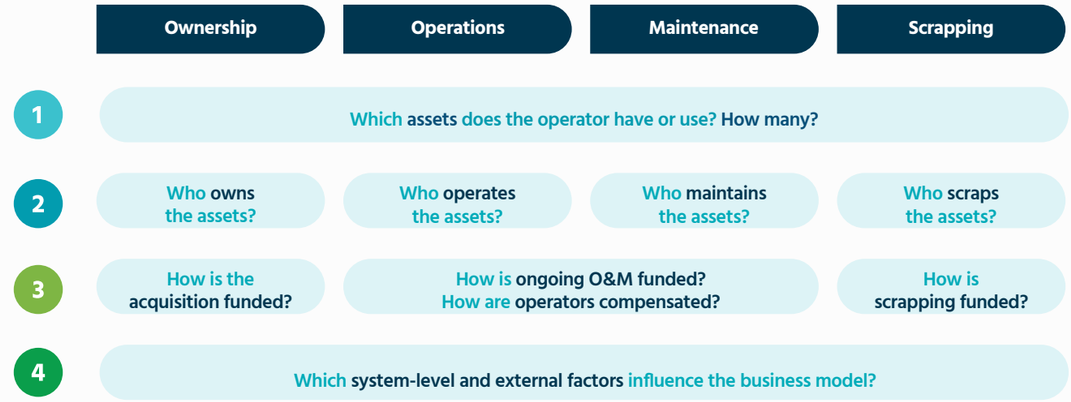


Figure 3: Characterization of bus operator business models

2. Classification of financing sources

The way cities design and finance public transport projects depends largely on the situation and capacity of the cities to develop them and their relationship with the different actors involved in the projects. In order to make on point decisions, it is important to consider, for example, the design of the business model and to decide whether to separate the investment from the capital of the operation in order to increase competition, distribute risks and have the capacity to disengage from ineffective providers.

Traditionally, a city or municipality that promotes a project has four broad sources of financing:

1. Municipal income
2. Intergovernmental transfers
3. Loans obtained with the private sector or with national government entities
4. International financing in the form of loans

The following section describes in detail the main sources of financing, listed in the following diagram.

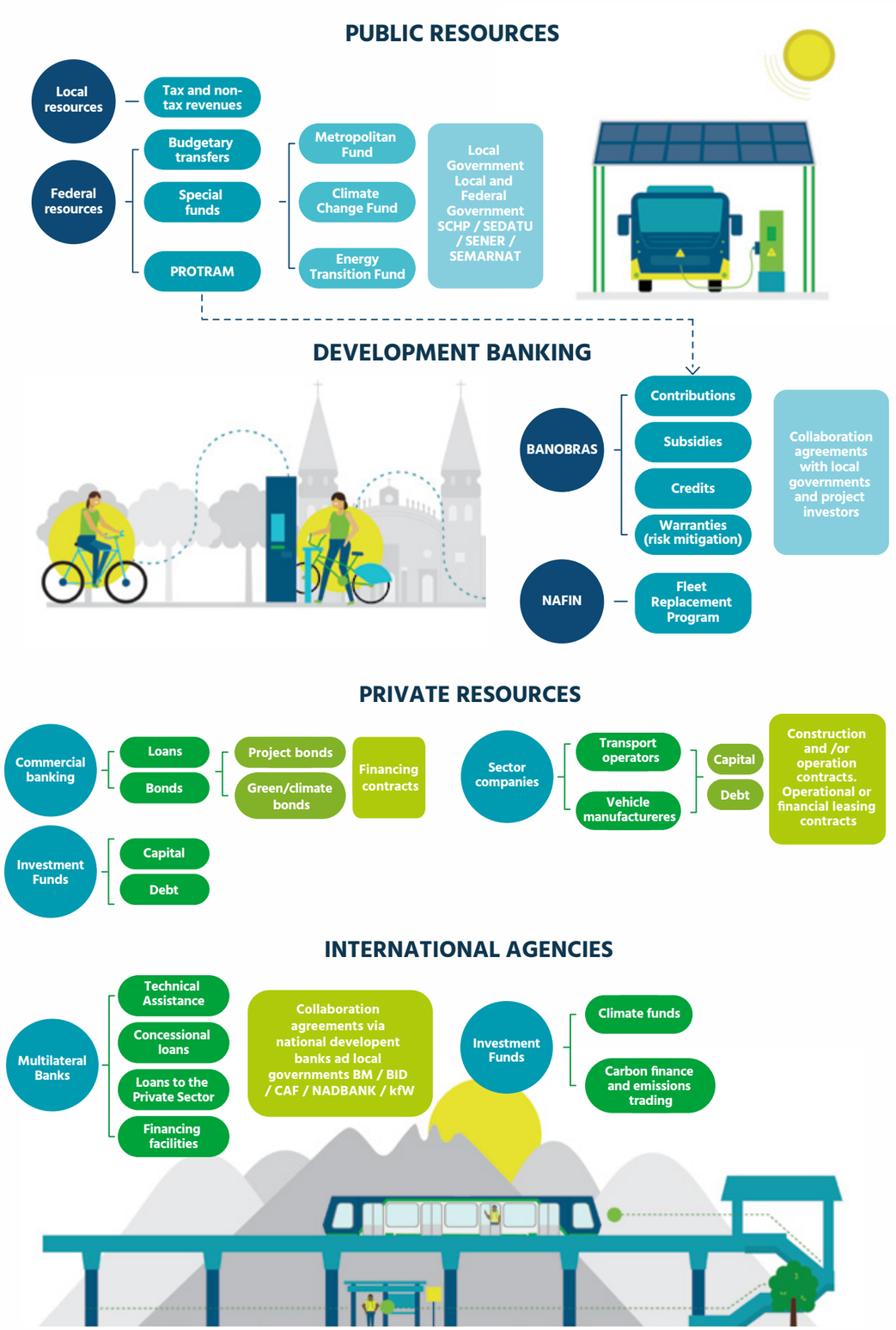


Figure 4: Classification of financing sources

3. Public funds

Local resources

The resources that are collected by the authority through local taxes or other applicable income that is not subject to federal transfers or shares. Potential local revenue sources include payroll taxes, local business/property taxes and relevant vehicle taxation.

Vehicles and relevant infrastructure may be purchased using resources from the municipal budget is there are sufficient resources, as is the case with the trolleybuses acquired by the Mexico City government in 2019.

Metropolitan fund (FM)

The funds objective is to support infrastructure projects aimed at promoting regional development and urban planning (SCHP, 2020). Resources are available to Mexico's metropolitan areas.

FM resources are approved in the Federal Expenditure Budget (PEF) and are transferred to the state in which the metropolitan area is located.

The fund can be used to:

- Deliver public infrastructure projects to meet basic services, road infrastructure, urban mobility, public spaces and other priority items of metropolitan interest.
- Develop cost-benefit analysis' or pre-investment studies.
- Create metropolitan planning programs, metropolitan development plans and other planning instruments established in the General Law of Human Settlements, Territorial Planning and Urban Development
- Provide support to create and equip Mexico's metropolitan planning institutes (which exist in every state) or equivalent bodies to develop adequate projects, excluding any operating expenses.

Metropolitan Transportation Programme (PROTRAM)

The objective of the programme is to support cities (500,000+ persons) to improve their mass transport systems and typically is aimed at local governments or private investors/ transport operators.

The process of obtaining support from the program is composed of several phases, with special emphasis on the preparation phase. Projects are evaluated by the PROTRAM consultative working group led by the SHCP's Public Credit Unit and with the participation of the Ministry of Communication and Transportation, BANOBRAS, the Ministry of the Environment and Natural Resources (SEMARNAT), and the Ministry of Agrarian, Territorial and Urban Development (SEDATU).

Local governments can access support for:

1. A grant to cover up to 50 percent of the number of studies
2. A grant to cover up to 50 percent of the cost of infrastructure (excluding any applicable VAT)

The program requires a 34% contribution from private investment in the projects, typically by transport operators, who make the investments in the vehicle fleet and the collection system. In addition, PROTRAM can offer credit guarantees through BANOBRAS to reduce the project's risk in order to facilitate access to bank loans and encourage great private sector involvement.

Climate Change Fund

Created in 2012, the fund is derived from Article 80 of the General Law on Climate Change, which seeks to ensure a healthy environment and reduce pollutant and greenhouse gases. The purpose of the trust is to capture and channel public, private, national and international financial resources to support the implementation of actions aimed at mitigating the effects of climate change, which could include electromobility projects.

The fund's resources are administered through the Ministry of Finance and Public Credit, which acts as trustor, while the trust institution is Nacional Financiera (NAFIN) and the unit responsible is SEMARNAT.

In 2017, the call was directed to promote low emission public transportation. A $160 million pesos exchange was established to promote the replacement of both CNG and last generation diesel passenger transportation units (SEMARNAT, 2018). For the 2019 call, the authorized amount was up to $40,498,271.62 (SEMARNAT, 2020)

Energy Transition and Sustainable Energy Use Fund (FOTEASE)

Its objective is to implement actions to contribute to the National Strategy for Energy Transition and Sustainable Use of Energy (ENTEASE), promoting the use, development and investment in renewable energies for energy efficiency (Government of Mexico, 2020).

The Ministry of Finance and Public Credit (SHCP) is responsible for attracting and channelling public and private, national or international financial resources to this fund. The resources are managed through a trust, being the SCHP the trustor and BANOBRAS the fiduciary institution. (Government of Mexico, 2020). The General Directorate of Clean Energy (DGEL) is responsible for supervising the operation of the FOTEASE.

The fund is accessible to any entity, public or private, which contributes to the delivery of ENTEASE following approval by the council and may be in the form of a grant or loan (Government of Mexico, 2020).

Within the FOTEASE, the Project for the Promotion of Electromobility through Investment in Recharge Infrastructure (PEII) has been designed to support the installation of "electrolineras" (Chamber of Deputies, 2018). While the impact of FOTEASE in delivering electromobility projects has been limited to date may have a long-term positive impact, to facilitate the development the transition of energy infrastructure to accommodate electric public transportation.

4. National development bank

Mexico has several state-owned banks who support the economic and social development of the nation through a variety of financing sources and mechanisms. However, only two are support the deployment of e-mobility – NAFIN and BANOBRAS. Figure 6 outlines the financial products available through BANOBRAS. Table 2 provides an overview of BANOBRAS and NAFIN.

In Mexico, 84% of state revenues come from federal sources and this generates a high dependence from local governments on them to finance their mobility projects.

BANOBRAS

BANOBRAS is a Mexican development bank created to encourage the creation of public infrastructure promoted by the Federal Government. To support this, it develops financing schemes to promote the participation of the private sector and commercial banks in long-term infrastructure and public service projects (BANOBRAS, 2020) and provides financing and technical assistance to cities, states and decentralized public agencies.

It should be noted that in the case of electromobility projects, guarantees are of special interest to investors. BANOBRAS provides financial guarantees, also known as Guarantees of Opportune Payment (GPO), which can support operations with the stock market, commercial banks, or other financial intermediaries, with the objective of mitigating the risks of the projects and thus facilitating their financing (BANOBRAS, 2020).

NAFIN

NAFIN is a Mexican development bank created to support access to financial products for micro, small and medium enterprises (MSMEs) with the ultimate goal of promoting innovation, improving productivity, competitiveness, job creation and regional growth (NAFIN, 2020). Among the sectors served are environment, energy, health, finance, education, agriculture, tourism, social and labour.

NAFIN is funded with international credit lines and federal resources. It has cooperation agreements with international organizations such as: KfW, the European Investment Bank (EIB) and China Development Bank (CDB). NAFIN also acts as a financial agent between international financial organizations and the federal government, including the Inter-American Development Bank (IDB), the French Development Agency (AFD) and the World Bank IBRD IDA.

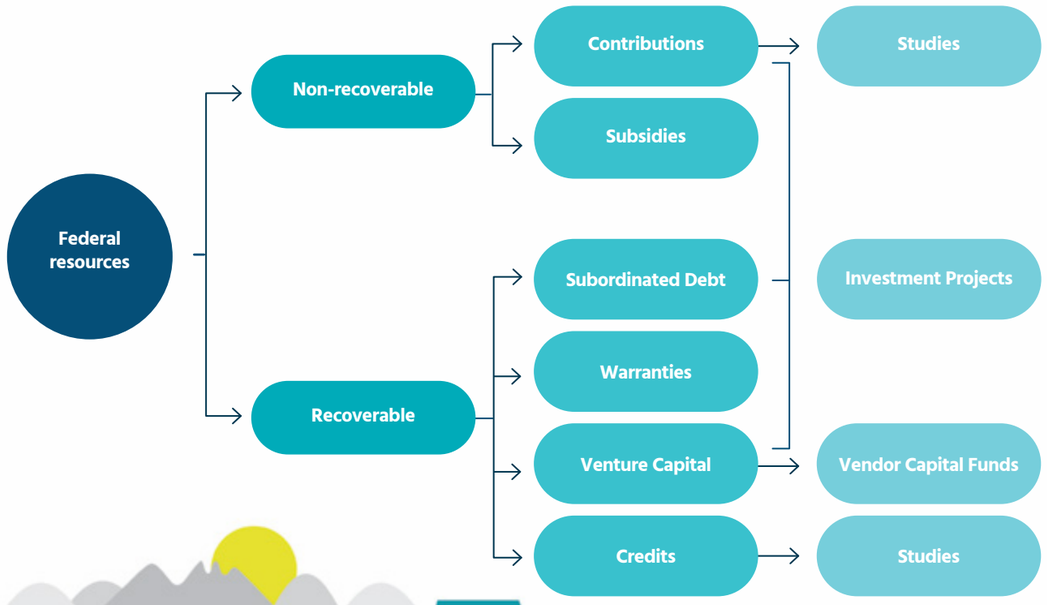


Figure 5: Products available from BANOBRAS

5. Private Resources

When cities consider the use of private resources for their electromobility projects, they must take into account the planned commercial arrangement for the project.

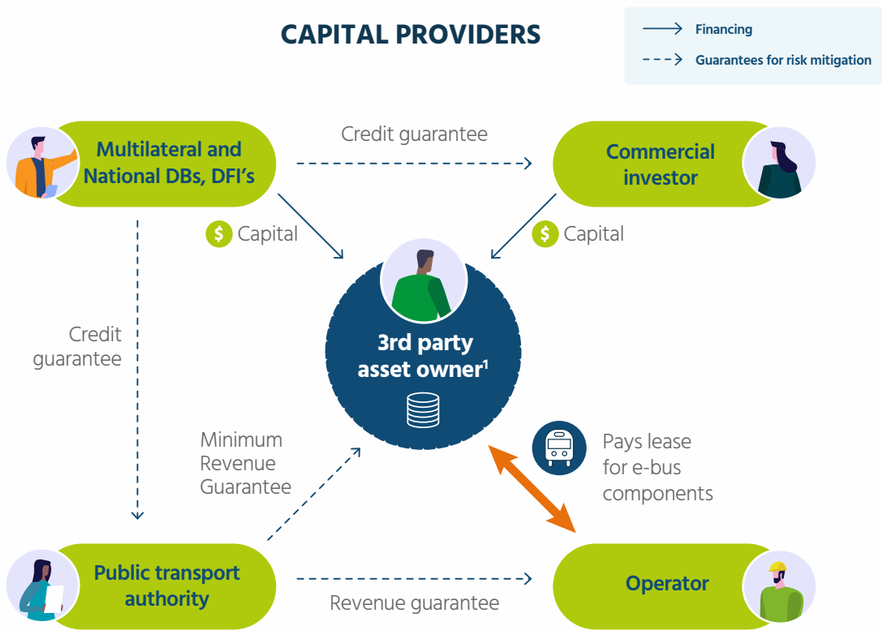
Traditionally, the commercial arrangement is carried out as shown in Figure 1 on page 5. Nevertheless, various cities are choosing two new types of commercial arrangements in order to mitigate the risks associated with zero emission bus projects.

The first commercial arrangement is called "concessional finance for asset owners". This arrangement provides attractive financing terms (such as through longer grace periods or lower interest rates) to asset owners which facilitates the purchase of electric buses.

The second arrangement is called "separation of asset ownership" and is found when a new player comes into the bus sector to buy electric bus assets to lease to traditional operators

In the case of the first commercial arrangement, multi-lateral international or national development banks can provide partial credit guarantee and the appropriate government structure can provide minimum revenue guarantee for the asset owner. Both of these elements help lower costs. On the other hand, in the case of the second commercial arrangement, multi-lateral international or national development banks can provide partial credit guarantee to investors financing the purchase of e-bus components and the appropriate government structure pays lease for e-bus components directly to asset owner.

It is important to keep these arrangements in mind as cities evaluate the private sector sources described in the following sections.



[1]A 3rd party asset owner could include utility companies, banks, bus manufacturers or asset-owner equity funds.

Figure 6: Commercial arrangement: separation of asset ownership

Bond issuance

Bonds are a fixed debt instrument, where capital is raised through the debt capital market to be able to finance assets or infrastructure and then repaid through one or more revenue streams. Bonds can be issued in many forms; project, proceeds, green/climate, green obligation or social impact.

Unlike a regular bond, in a green/climate bond the issuer publicly states that the proceeds of the bond are used to finance green projects, assets, or commercial activities that provide an environmental benefit, whether it be for renewable energy, low-carbon transportation, forestry, or any other activity that helps mitigate climate change.

To issue a green bond, projects undergo a process to assess the relevance of the application with respect to pre-established criteria and can include the financing of new projects or refinancing of existing projects. The net proceeds of the green bonds are then credited to a sub-account where the final destination of the resources can be tracked. Both new projects and refinancing of existing projects can be financed. There are additional transactional costs associated with green bonds compared to green bonds to cover the costs of initial accreditation and annual tracking, monitoring of the environmental benefits of the project and reporting on the use of the proceeds (Climate Bonds Initiative, 2020).

Commercial banking

For most commercial banks, the nature of the project does not make a difference in the criteria for granting financing, but rather the soundness of the business model, the quality of payment, the future revenue flows and participants. Collectively, these factors contribute to the perception of risk of the project failing or being unable to maintain payments and thus has a direct impact on the financing rates offered and the scale of financing available.

Investment funds

The electro-mobility projects have been of interest to investors who are not linked to the transport sector. The work of the Zero Emission Bus Rapid-deployment Accelerator (ZEBRA) partnership has involved capital providers to participate as investors in electromobility projects. This international alliance is working to secure USD1 billion in investments to deploy over 3,000 electric buses onto the streets of Latin America. As part of the commitment, manufacturers will expand their supply of electric buses in Latin America within 12 months, with a specific focus on cities in Brazil, Chile, Colombia, and Mexico, while financiers will make investment funds available for zero-emission bus projects.

On December 10th of 2020, ZEBRA announced the signing of a joint commitment with six private funds, including: AMP Capital, ARC, Ascendal, Ashmore, John Laing and NEoT.

Additional investors and investment platforms with interest in e-mobility projects include:

- Siemens Financial Services
- Sumatoria
- Transfondo
- Acumen Latam Capital Partners
- responsAbility

While the criteria for investment selection, as well as funding conditions, are established by each company, cities can use this initial list of partners to explore potential synergies in the search for resources for their zero emission bus projects.

Energy utilities

In Latin America, energy utilities have been one of the single most influential investors in the deployment of electric buses, financing the vast majority of units currently operating in Santiago.

In 2017, Metbus, one of Santiago's private bus operators, partnered with Enel, an Italian utility company, and BYD to bring two electric buses to operate under regular service in Santiago. As a result of this pilot, Metbus worked with BYD and Enel X, an Enel subsidiary, to scale the operation by adding an additional 100 units in 2019. Enel X acted as the financial agent and energy provider, leasing the buses to Metbus for 10 years; Metbus, in turn, operates the buses and provides basic maintenance, while BYD is in charge of more important maintenance operations including battery packs and electric drive trains.

Later in 2017, a similar partnership led by Engie, a French utility company with operations in Chile, launched a similar pilot program which resulted in a 2019 announcement stating that Engie would finance an additional 100 battery electric buses and work with two Transantiago operators. By April 2019, all buses were integrated into regular operations.

With this case study in mind, it is important for Mexican cities to explore potential partnerships with both national and international energy utilities.

6. International sources

Climate funds or green funds

Through the adoption of the United Nations Framework Convention on Climate Change (UNFCCC) in 1992, provisions were made for financial support and technology transfer, which gradually laid the foundation for the architecture of climate finance as it is known today (Carbon Trust Mexico S. A. de C.V. for INECC, 2016). Commitments to providing climate finance (both unilaterally and multilaterally) have been endorsed at subsequent climate summits. At COP 22 in Marrakech, Morocco, countries were urged to expand their financial contributions to the pre-agreed target of $100 billion by 2020 and to achieve a better balance between adaptation and mitigation (Carbon Trust Mexico S. A. de C.V. for INECC, 2016).

Obligations are met through contributing additional finance and transferring technologies to countries who are eligible to receive Overseas Development AID (ODA), typically from developed countries. Contributions to meet obligations can be global, multilateral, regional, bilateral, and national in

Fund	Type	Managed by	Area	Creation date
Clean Technology Fund	Multilateral	BID and World Bank	Mitigation	2008
Global Climate Change Alliance	Multilateral	European Commission	Both	2008
Global Energy Efficiency and Renewable Energy Fund	Multilateral	European Commission	Mitigation	2008
Green Climate Fund	Multilateral	World Bank	Both	2015
UK's International Climate Fund	Multilateral	Government of the UK	Both	2011
Germany's International Climate Initiative	Bilateral	Government of Germany	Both	2008
Japan's Fast Start Finance – Public Sources	Bilateral	Government of Japan	Both	2008
Mdg Achievement Fund – Environment and Climate Change Thematic Window	Bilateral	PNUD	Both	2007
Norway's International climate And Forest Initiative	Multilateral	Government of Norway	Mitigation	2008
Scaling-up Renewable Energy Program for Low Income Countries Special Climate Change Fund	Bilateral	World Bank	Mitigation	2009
Special Climate Change Fund	Multilateral	Global Environment Facility	Both	2002
Strategic Climate Fund	Multilateral	World Bank	Both	2008

Table 1: Climate funds available for financing climate change mitigation projects.

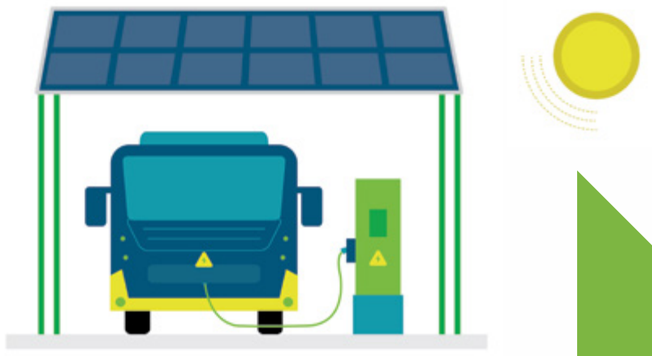
Bilateral and Multilateral Development Banks

Bilateral Development Banks and Multilateral Development Banks (MDBs) are international financial institutions created by national states with the objective of contributing to economic development through investment. In figure 8 you can find the relevant international development banks in the region that have a presence in Mexico and have participated in projects in the transportation sector in Mexico and Latin America.

Cities are starting to choose new types of commercial arrangements in order to mitigate the risks associated with zero emission bus projects.

World Bank	The World Bank has a presence in Latin America through the International Bank for Reconstruction and Development (IBRD) – a global development cooperative which is owned by 189 countries. The IBRD offers loans, guarantees, risk management products, and advisory services to middle-income and low-income countries with credit capacity (IBRD, 2020) and has supported sustainable transport programs across Latin America. In addition, a WB subsidiary – International Finance Corporation (IFC), which is an international development institution dedicated exclusively to the private sector in developing countries. It offers development solutions tailored to client needs by applying financial resources, technical expertise, global experience, and innovation capacity to help partners in its member countries overcome their financial, operational and political challenges.
German Development Bank (KfW)	Created by the by the German Federal Government, its role in development cooperation is that of both an experienced bank and a specialised institution in development policy. It promotes and accompanies programs and projects with predominantly state-owned entities in developing countries, from implementation to final monitoring of results (KfW Development Bank, 2020). KfW's objectives include planning, financing and implementing sustainable mobility concepts as well as strengthening public and non-motorised transport, reducing the amount of GHGs and other harmful emissions and reducing the number of accidents. KfW's funds are transferred via a national development bank with whom there is an agreement. In Mexico, KfW is in the process of signing an agreement with NAFIN to support the vehicle fleet renewal program aimed at public transportation entrepreneurs.
Inter-American Development Bank IDB	Its institutional strategy is to establish social inclusion and equality, productivity and innovation and economic integration, gender equality, climate change and environmental sustainability, and institutional capacity and rule of law as priority issues for financing (Carbon Trust Mexico S. A. de C.V. for INECC, 2016). Regarding electromobility, the IDB has conducted several studies and supported projects in the region. Through the UKSIP Program and the NDC Accelerator Fund, the IDB seeks to promote electric vehicle projects by providing technical support, financing, risk management and access to concessional loans (Lefevre, 2019). Among the projects it supports are clean energy, modernizing agriculture, strengthening transportation systems and expanding access to financing (IDB Invest, 2020). Type of projects eligible for IDB Invest support for transportation: • Energy: Accelerating the transition from fossil-fuel based energy to renewable energy and support for energy efficiency technologies. • Investment funds: support for both private equity funds and private credit funds that provide capital and promote the expansion and modernization of companies with growth potential, financial institutions and projects that promote development and sustainability in the region. • Transportation: Support for the construction and modernization of transportation infrastructure and services in areas such as ports, highways, airports, subways, and railroads. (IDB Invest, 2020).
Development Bank of Latin America (CAF)	CAF promotes a sustainable development model through credit operations, non-reimbursable resources, and support in the technical and financial structure of public and private sector projects in Latin America. It provides advice and financial support to public and private sector companies in shareholder countries and generates knowledge to strengthen public policies and thus improve the quality and impact of their projects (Latin American Development Bank, CAF, 2020). Support is available to governments and government entities, as well as legal entities, public, or private in its member countries. Resources can be transferred directly to their clients or through financial intermediaries, either independently or together with other Financial Institutions.
The North American Development Bank (BDAN)	The institution's capital is provided by the governments of Mexico and the United States and can be utilised to finance projects in the 300 km strip south of the border and 100 km to the north. The objective is to support projects that help preserve, protect, or improve the environment in the region. NADB's portfolio includes water, waste management, air quality, energy, and basic urban infrastructure projects. NADB has the following tools (NADB, 2020): • Credit programs: can be accessed by public or private entities. The products that can be offered are direct credits, revolving credit lines and participation in municipal bond issuance. • Community Support Program (PAC), which provides financial grants to infrastructure projects in marginalised populations whose promoters have little debt capacity. • Border Environmental Infrastructure Fund (BEIF): provides grants for the delivery of priority municipal infrastructure projects for drinking water, sewerage, and sanitation, which are located within the 100 km strip on both sides of the border between Mexico and the States.

Table 2: Bilateral and Multilateral Development Banks



7. State and local funding mechanisms

Local sources of funding help ensure that more resources are available to improve mobility and that projects are not totally dependent on federal funds. They can be used to create an exchange to finance investments in new projects or to supplement revenues from transportation systems.

The following diagram shows a variety of funding mechanisms that municipalities or states can use for electromobility projects:

It is important to analyse a variety of commercial arrangements to identify the best solution.

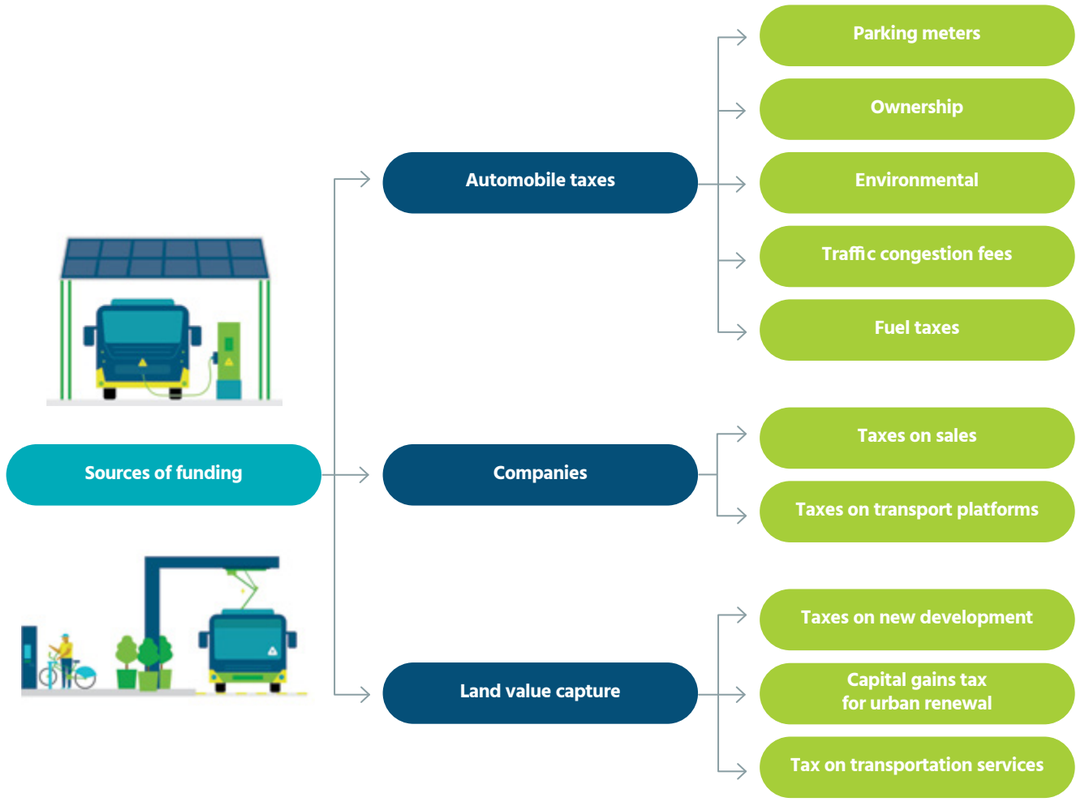
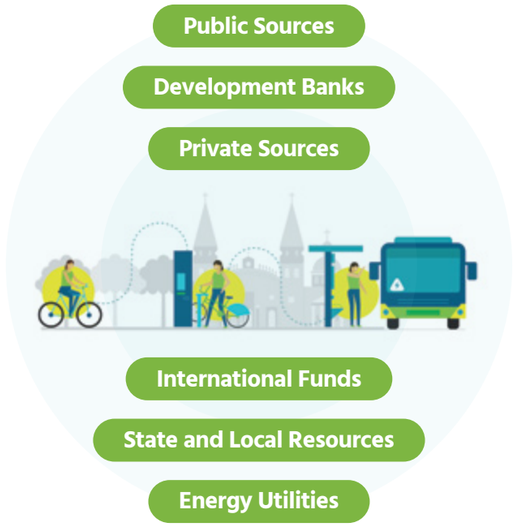


Figure 7: State and local sources of funding

8. Conclusion

Introducing electromobility into cities is definitely a challenge; nevertheless, the impending climate crisis and COVID-19 have demonstrated more than ever that it is a necessary transition for cities. Latin American cities have been able to make e-mobility projects possible thanks to the political will demonstrated in some cities, overcoming some of the most significant challenges, including larger upfront capital costs.

To overcome these challenges, it is essential that transit authorities start to utilise a wider range of financial options, moving beyond the existing grants and transfers from national governments, municipal reserves or national development bank support which have been the most prevalent options to finance transit until now. When evaluating potential financing options for their electromobility projects, it is recommended that cities conduct an evaluation of available sources, including:



This report aims to provide a comprehensive overview of the financial products available in Mexico that could be used to deploy zero-emission transport in the country's cities. Nevertheless, the authors have not reviewed the ease of acquiring these financing sources. Accessing finance from development banks (in particular bilateral and multilateral) can involve long timelines. In addition, public funds are currently limited in the scope for support zero-emission transit and climate funds will require significant national government involvement. These barriers have resulted in many cities using internal resources or adopting alternative business models involving the private sector.

The city of Santiago de Chile has been able to deploy 776 zero-emission buses in just a few years by creating new innovative business models that utilise capital and skills provided by new private actors (ZEBRA, 2020 & LABMOB, 2020) and distribute risk between several partners, while Bogotá plans to have 1485 zero-emission buses in the next couple of years. The participation of these new actors, especially private ones, in public transport projects, can only be successful alongside strong support from and in collaboration with local governments (and national).

The city of Santiago de Chile has been able to deploy 776 zero-emission buses by creating new business models that utilise capital and skills provided by private actors

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C40 Cities Climate Leadership Group
3 Queen Victoria Street
London EC4N 4TQ
United Kingdom

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
Potsdamer Platz 10
10785 Berlin
Germany

E contact@c40cff.org
W c40cff.org

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