metrotenerife

ALLOCATION AND IMPACT REPORT GREEN BOND

2022

INDEX

EXECUTIVE SUMMARY

At the end of July 2021, Metropolitano de Tenerife issued its first green bond with a volume of 130 million euros and a maturity of 15 years. The issuance was made in accordance with Metropolitano de Tenerife's 2021 Green Bond Framework, designed according to ICMA's Green Bond Principles (2018) and verified by Sustainalytics and S&P.

The funds from the bond would be used to finance green projects, in particular the refinancing of the infrastructure of the tramway lines and the financing of the photovoltaic plants integrated into the transport system infrastructure. The projects are linked, respectively, to the eligible categories *clean transportation* and *renewable energy*. In addition, they are expected to contribute to the achievement of Sustainable Development Goals 7 (Affordable and clean energy), 9 (Industry, innovation and infrastructure), 11 (Sustainable cities and communities) and 13 (Climate action).

It has been estimated that, thanks to the operation of the tramway and during the period 2018-2021, 1,090.50 tCO2e of greenhouse gas emissions have been avoided, each year, on average.

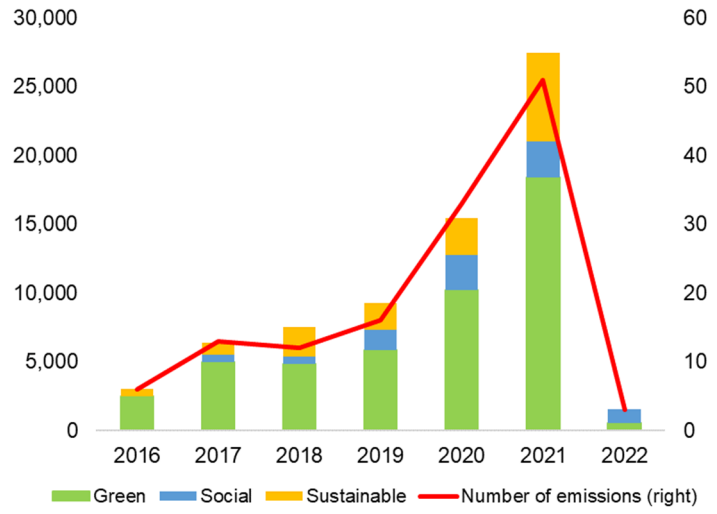
1. INTRODUCTION

1.1 BRIEF BACKGROUND OF THE SUSTAINABLE DEBT MARKET

The European Investment Bank issued the first green bond in 2007[1]. Today we observe an increasing trend in terms of financial resources devoted to fund sustainable projects.

As the figure below outlines, the volume of green, social and sustainability bonds issued in Spain increased in 2021 with respect to 2020 (in particular, 77.43%). The issuance of sustainability bonds and social bonds, however, continued to be lower than that of green bonds. In 2021, the share of green bonds was 66.94% whereas the share of sustainability and social bonds were, respectively, 23.50% and 9,56%. Since 2016, green bonds prevail in the Spanish sustainable debt market, followed by sustainability bonds. Notwithstanding the above, social bonds greatly increased in 2019 and 2020. The increasing trend in the issuance of social bonds remained in 2020 following the outbreak of Covid-19 and was largely related to mitigating the most urgent impacts of Covid-19, but later on subsided along with this crisis[2]. This year the sustainable debt market was partly marked by the great expectations on Cop-26, the released of updated Green[3] and Social[4] Bond Principles by ICMA and the publication of the first set of EU Taxonomy technical screening criteria[5].

Figure 1. Issuance of Green, Social and Sustainability Bonds in Spain (€ million).



Source: AFI, Bloomberg (data downloaded in February 2022)

[1] Following the definition from ICMA, a green (social) bond is any bond whose proceeds are exclusively used to finance or refinance eligible green (social) projects, partially or totally, and that are aligned with the four components of the GBP (SBP).

2 Climate Bonds Initiative: Sustainable debt market (2022).

[3] https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/green-bond-principles-gbp/

[4] https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/social-bond-principles-sbp/

[5] https://www.boe.es/buscar/doc.php?id=DOUE-L-2021-81725

So far this year (2022), the share of green bonds is 34,64% while that of social bonds is 65,36%; which leaves the share of sustainability bonds at the beginning of 2022 in 0% (undoubtedly, this last figure is expected to increase during the rest of the year). In 2022, however, the sell-off in the bond markets, rising interest rates, the war in Ukraine and the resulting market volatility have led to a slowdown in bond issuance, with impacts in the sustainable debt market as well[6]. The events that took place in the first quarter of 2022 have highlighted the urgency to accelerate the transition to a global low-carbon economy.

1.2 MAIN OBJECTIVES OF THE REPORT AND DESCRIPTION OF THE BOND

"Green bond issuers are encouraged to report on both the use of green bond proceeds, as well as the expected environmental impacts at least on an annual basis"[7].

Metropolitano de Tenerife S.A. (Metrotenerife) is a public transport company[8] founded in 2001 with the goal of developing new alternative public transport solutions in the form of railway lines and link the two large cities of the island by light rail. The Cabildo Insular de Tenerife (Tenerife Island Government) witnessed the necessity to address the problem of transport in the Metropolitan Area of Santa Cruz de Tenerife and San Cristóbal de La Laguna, given the increasing density and complexity in the road network, the increase in the traffic intensity on urban and interurban roads and the resulting pressures on the insular environment. In addition, the insular environment is limited and topographically difficult. This represented and ambitious project in a geographical space with many technical difficulties (high slope, route on the main roads of the cities) and novel for citizens, but which involves a series of positive externalities for the transport system, such as speed, reliability, punctuality and lower environmental impact.

Metrotenerife has its headquarters in Spain. With the purpose of **building a railway network** that would serve the whole island, Metrotenerife is working on railway projects in the North and South of the island. Simultaneously, the company improves the existing facilities and develops other projects to continue expanding and proposing innovative solutions in public transport.

Rail transportation sector will play a key role in the achievement of EU's commitments to reduce Greenhouse Gas (GHG) Emissions by at least 40% by 2030 as well as the climate neutrality goal by 2050. As a provider of public transport services in the Metropolitan area of Tenerife, Metrotenerife intends to greatly contribute to this commitment at the local level. In fact, rail transportation is the most efficient means of transport in terms of energy consumed. The development and use of trains can reduce atmospheric pollution and GHG emissions, and therefore, contribute to the fight against climate change.

Metrotenerife's Board is conscious of the importance of offering a transportation service that contributes to the sustainable development while satisfying the commuting needs of its citizens. Metrotenerife holds the solid purpose of mobilizing Tenerife towards a more sustainable,

[6] Ibid.
[7] ICMA et al. (2021): Handbook. Harmonized Framework for Impact Reporting. https://www.icmagroup.org/sustainable-finance/impact-reporting/

[8] Fully owned by the Cabildo Insular de Tenerife (Tenerife Island Government), Metrotenerife is a solid and self-sufficient company with income from the two tramlines covering all operating and maintenance costs.

accessible and intelligent mobility system. In this sense, the company aims to be a key agent in sustainable public transport and one of the main axis in the transport system of the island.

In particular, Metrotenerife deeply believes that green bonds are an effective funding tool to meet the financing gap that needs to be bridged to combat climate change, thus transitioning towards a carbon neutral world. Through its inaugural green bond issuance, Metrotenerife strives to contribute to the development of the Sustainable Debt Market by providing both, itself and the investor community, an opportunity to channel proceeds to finance green projects (see Use of Proceeds).

In compliance with the Green Bond Principles (GBP; ICMA, 2018), the report at hand follows the indications outlined in their fourth component: the elaboration of a fund allocation report. Although these principles are not compulsory, they stand as the reference framework in the sustainability debt market. This report has also considered the Harmonized Framework for Impact Reporting (ICMA, 2020).

The aim of this report is to provide information regarding the allocation of funds from the inaugural green bond issued by Metropolitano de Tenerife on July 20, 2021. Its issuance volume was €130 million (for more details, see Figure *2*).

In November 2019, Standard & Poor´s assigned its 'A/A-1' long- and short-term ratings with a stable outlook to Metrotenerife. This figure is equal to the rating of the Kingdom of Spain.

Figure 2. Metropolitano de Tenerife's Inaugural Green Bond, Financial Terms and Conditions.

Terms and Conditions

Issuer	**Metropolitano de Tenerife.** Ratings: A (Neg-outlook) by S&P
ISIN	ES0205597000
Pricing Date	20th July 2021
Settlement	30th July 2021
Maturity Date	30th July 2036
Amount	€130 million
Coupon	1.229
Reoffer Spread	SPGB[9] Interpolated curve (07/35 & 07/37) + 55bps
Listing and Trading	Iberclear / AIAF

Source: Metrotenerife, Bloomberg, Afi

[9] Spain Government Bonds.

Following the Green Bond Principles (GBP) from ICMA, the **Green Bond Framework of Metrotenerife**[10] establishes the guidelines that will be followed in its green bond issuances, in the form of four core components:

i. Use of Proceeds

This section defines the eligibility criteria for green expenditures and classify them into 2 green categories, **clean transportation** and **renewable energy**. It also specifies:

- the eligibility criteria
- the typology of projects that could be potentially included in each expenditure category
- the contribution to the United Nations' Sustainable Development Goals (SDGs)

ii. Process for Project Evaluation and Selection

Metrotenerife is responsible for the financing strategy of the projects of infrastructure to be operated by Metrotenerife, which should be previously approved by the Island Government, Cabildo de Tenerife.

Metrotenerife has established a Green Bond Committee who proposes to Metrotenerife's Board the financing of new infrastructures or the refinancing of existing infrastructures in alignment with the eligibility criteria defined in the Green Bond Framework.

The Green Bond Committee builds and monitors the green portfolio of Metrotenerife, composed of eligible green projects. It is responsible of eliminating those projects that are no longer eligible, which could be substituted by new eligible green projects in case it is deemed necessary.

iii. Management of Proceeds

On annual basis, the Green Bond Committee will monitor the green portfolio in order to ensure that the total amount of the eligible green projects exceeds the total amount of Green Bonds issued. In case of insufficient Eligible Green Projects in the Portfolio, Metrotenerife will invest the balance of the net proceeds in cash or cash equivalent instruments according to its treasury management policy.

In case of refinancing, and considering that projects costs would be fully disbursed in the past, no separate management of proceeds is required.

iv. Reporting

Metrotenerife will provide to investors and other stakeholders the reporting on the allocation of the net proceeds and the environmental impact of the Eligible Green Projects financed. This report responds to the requirements of this forth component.

[10] https://inversor.metrotenerife.com/aptdo-elemento/marco-de-bonos-verdes/

The reporting will be made available on Metrotenerife's website:
https://metrotenerife.com/home/

The structure of this report is organised in four sections. Section 2 describes the methodology used and the assumptions taken to elaborate this report. Section 3 describes the allocation of funds to the green projects, together with the relevant financial and qualitative information in relation to the projects financed. The sustainable output and impact analysis in terms of sustainability is explained in Section 4 (Annex I extends this information).

2. METHODOLOGY AND ASSUMPTIONS

This section explains how the resources have been allocated and its impact measured. Following the guidelines from ICMA (Harmonized Framework for Impact Reporting), qualitative and quantitative indicators have been collected for each selected project. Thus, this analysis has been made project-by-project rather than in a programme level. All the results described in the following sections are based in this methodology.

The ensemble of follow-up indicators has been selected according to the Green Bond Framework of Metrotenerife and their ability to determine and show the results achieved. In particular, indicators must be:

- **Relevant**: they must allow to analyse the incidence in the socioeconomic environment, through the measurement of the accomplishments or outputs that the funded projects generate.
- **Meaningful**: they must be able to monitor the progress achieved in such a manner that they make possible an easy the communication of results to the main stakeholders.
- **Reliable**: they must allow to quantify and update the information as it evolves on time. The reliability of the indicators depends on how the supporting information is collected and processed, on the credibility of sources, and on information quality control processes.

In this report we will distinguish between output indicators and impact indicators, where the first type refers to tangible services produced as a result of the projects and the second one to long-term changes that result from the projects. In the case of the impact metric selected, i. e. estimated annual avoided GHG emissions, the methodology used is detailed in section 4.2 and the assumptions taken are collected in Annex I.

3. ALLOCATION REPORT

3.1 QUALITATIVE ANALYSIS OF THE PROJECTS FINANCED

This section describes the list of projects re-financed. In particular, it introduces information on the project name; the project green category and eligible criteria; the alignment with the SDGs; and the amount of social/green bond proceeds allocated to the selected projects. Furthermore, the target population is also indicated.

The funds are allocated to eligible green projects of one of the two eligible, clean transportation and renewable energy. Thanks to the financial resources of the green bond of Metrotenerife, it has been possible to develop **two green projects** related to the implementation of Tenerife's tramway:

1. **Full and early amortization of the previous financial structure to finance the infrastructure of the tramway lines (See 3)**

This project corresponds to the **clean transportation** category and contributes to the SDGs 9 (Industry, innovation and infrastructure; targets 9.1, 9.5), 11 (Sustainable cities and communities; target 11.2) and 13 (Climate action; target 13.2).

Figure 3. Lines 1 and 2 of Tenerife's tramway.

Source: Memoria Anual Metrotenerife, 2020

In particular, the funds have refinanced the extension of the infrastructure of the tramway's lines (lines 1 and 2 of the light rail).

In the first years after the foundation of Metropolitano de Tenerife (See Section 1), mobility studies, environmental impact studies, construction projects and territorial plans were carried out, so that the investment began to be presented as a real project. The economic quantification of the cost of execution and the search for the necessary funds were carried out in a double way: signing collaboration agreements with all the corporations involved and through financing with banking entities.

The construction and commissioning of line 1 was carried out in 2007. Hereafter, in 2008, with the experience acquired, Metrotenerife began the construction of line 2 of the light rail that ended in 2009, the year in which its operation began.

2. Lease agreements for photovoltaic plants (Stage I and Stage II)

The second project relates to the lease agreements for the photovoltaic plants. This project corresponds to the **renewable energy** category and contributes to the SDGs 7 (Affordable and clean energy; target 7.2) and 13 (Climate action; target 13.2).

The photovoltaic plants are integrated in the infrastructure of the transportation system. In 2008, Metrotenerife carried out the investment project in photovoltaic plants, that were installed on the roof of the building that serve as workshop and garage of the light rail infrastructure. The photovoltaic plants were installed in two stages. The installation of the photovoltaic plants of Stage I started on July 2008, whereas Stage II started in September of the same year. The photovoltaic plants started to operate in September 2008 (Stage I) and in January 2009 (Stage II).

The **beneficiaries of the projects** correspond to the annual users of the tramway, which are 13,440,401 people[11]. 50.10% of them were women in 2020, whereas 41,90% were male. In terms of age, the tramway is widely used by people under 25 years old, and not as often by people over 65 years old. In 2020[12], 40,84% corresponded to the first age group, whereas only 5.08% corresponded to people over 65 years old. In terms of reason for the trip, the most frequents are commuting (23% of the users) and going to the education centre (17.70% of the users)[13]. All in all, a diverse variety of demographic groups has benefited from the projects financed by the green bond.

3.2 FINANCIAL INFORMATION

Figure 4 and Figure 5 present the summary of the main figures of the financing structure of the tramway infrastructure, divided in 4 parts:

- Total costs of the infrastructure of the tramway (lines 1 and 2) and costs of the investment in the photovoltaic plants
- Previous financing agreements
- (A) Allocation of the green bond proceeds: project (1) and project (2)
- (B) Balance of unallocated proceeds

[11] Mean of the period 2010-2020.
[12] Note that this data are biased due to the influence of the Covid-19 in the preferences regarding means of transportation and, specially, public transprotation. Cfr. Memorias anuales de Metrotenerife.
[13] Cfr. Memoria anual de Metrotenerife (2020).

Figure 4. Previous financing structure.

Costs of implementing lines 1 and 2 of Tenerife's tramway	
Total cost line 1	342,705,208.00 €
Total cost line 2	60,743,326.00 €
Cost of investment in the photovoltaic plants integrated into the infrastructure of the transport system	
Total cost of photovoltaic plants	4,977,808.98 €
Total cost	408,426,342.98 €
To partially finance these projects (total costs lines 1 and 2), several financing contracts were signed	
Financing costs (financing and loan contract with syndicated bank)	117,644,000.00 €
Financing costs to be amortized (at the time of the issuance of the green bond)	93,838,350.00 €
Cost of the operations for interest rate risk hedging	33,900,000.00 €
Total financing costs	**127,738,350.00 €**

Source: Metropolitano de Tenerife, Afi

Figure 5. Allocation of proceeds to projects 1 and 2 (A) and unallocated proceeds (B).

A. Allocation of funds from the issuance of the green bond (€130M)	
(1) Full and early amortization of the previous financial structure	
Cancellation of the debt related to the financing contracts	127,738,350.00 €
Total allocated (1)	**127,738,350.00 €**
(2) Lease agreements for the photovoltaic plants	
Payment of leasing fees - Photovoltaic Plant Stage I	285,979.10 €
Payment of leasing fees - Photovoltaic Plant Stage II	106,938.85 €
Total allocated (2)	**392,917.95 €**
Total amount of the net proceeds allocated to the Green Portfolio (1+2)	**128,131,267.95 €**
B. Balance of unallocated proceeds	
Unallocated proceeds*	**1,868,732.05 €**

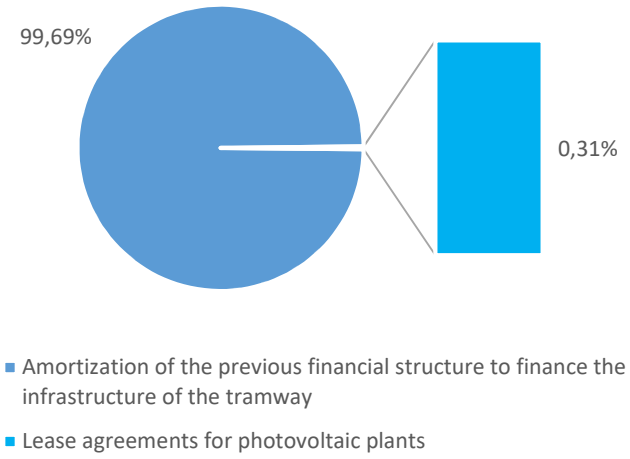
* The unallocated proceeds will be allocated to pay the outstanding lease payments of the photovoltaic plants, to projects to expand the current network and to renovation and maintenance costs of the infrastructure of Lines 1 and 2.

Source: Metropolitano de Tenerife, Afi

In financial terms, as can be observed in Figure 6, the refinancing of the financial costs derived from the implementation of the tramway (clean transportation), has been especially important. Nevertheless, the photovoltaic plants (renewable energy) have been crucial in terms of sustainability criteria, since they provide 14.70%[14] of the total energy consumed annually by Tenerife's tramway.

[14] Cfr. Memorias anuales de Metrotenerife.
Mean of the period 2010-2020.

Figure 6. Allocation of proceeds per eligible green category.



Source: Metrotenerife, Afi.

Finally, **unallocated proceeds** (1.44% of the bond's proceeds) will be allocated to pay the outstanding lease payments of the photovoltaic plants, to projects to expand the current network and to renovation and maintenance costs of the infrastructure of Lines 1 and 2.

4. OUTPUT AND IMPACT REPORT

4.1 OUTPUT METRICS

This section includes the quantitative information to monitor the outputs derived from the investment in projects 1 and 2.

Project 1. Investment in the extension of the infrastructure of Tenerife's tramway, lines 1 and 2 of the light rail.

- Kilometres of infrastructure constructed or renovated

Kilometers of infrastructure constructed or renovated	
Line 1 - Km between the stations *Intercambiador* and *La Trinidad*	12.45 km
Line 2 - Km between the stations *La Cuesta* and *Tíncer*	3.43 km
Total	15.88 km

Source: Metrotenerife, Afi.

- Number of passengers transported annually

Year	Passengers
2010	13,946,405
2011	13,973,149
2012	13,191,105
2013	12,459,172
2014	12,726,906
2015	13,273,083
2016	13,490,312
2017	14,158,691
2018	14,757,687
2019	15,554,855
2020	10,313,051
2021	12,543,185
30/04/2022	4,631,447
TOTAL	165,019,048

Source: Metrotenerife, Afi.

- Number of job positions created

The average workforce since the beginning of the activity at Metrotenerife has been the following:

Year	Average workforce (people)
2007	131.90
2008	153.80
2009	187.40
2010	188.00
2011	186.30
2012	180.60
2013	178.70
2014	175.50
2015	178.08
2016	181.33
2017	180.08
2018	180.01
2019	186.70
2020	194.50
2021	206.36

Source: Metrotenerife, Afi.

Project 2. Photovoltaic plants integrated in the infrastructure of the transportation system

The figure below summarises the following information. During the **Stage I** of the construction of the photovoltaic plants, it was constructed a plant of 600 kW with a total area of 4,698.04 m^2. The plant is composed of 3,680 photovoltaic modules of 175 W of maximum power and 6 three-phase inverters of 100 kW of nominal power.

During **Stage II**, it was constructed a new photovoltaic plant of 280 kW with a total area of 2,132 m^2. It is composed of 1,608 photovoltaic modules of 175 W of nominal power and 3 three-phase inverters of 100 kW of nominal power.

The average annual production of both photovoltaic plants, from the year it was installed until 2021, is 1,356,074 kWh/year. To feed all the energy into the grid, there is a 1,000 kVA[15] transformer that supplies a three-phase voltage of 20 kV[16] with a frequency of 50 hz.

[15] The unit of measure corresponds to kilovoltampere (kVA).
[16] The unit of measure corresponds to kilovolt (kV).

Figure 7. Photovoltaic plants' description.

	Renewable energy capacity installed (KW)	Photovoltaic plants surface	Structure	Average renewable energy generation (KWh/year)
Stage I	600 KW	4,698.04 m^2	Composed of 3,680 photovoltaic modules of 175 W of maximum power and 6 three-phase inverters of 100 kW of nominal power.	1,356,074 kWh/year
Stage II	280 KW	2,132 m^2	Composed of 1,608 photovoltaic modules of 175 W of maximum power and 3 three-phase inverters of 100 kW of nominal power.	

Source: Metrotenerife, Afi

4.2 IMPACT METRIC

- Estimated annual avoided GHG emissions (in tCO2e/year)

The estimated annual avoided greenhouse gas (GHG) emissions (in tCO2e/year)[17] derived from the implementation of the tramway in Tenerife can be observed in *Figure 9*. In 2018, 2019, 2020 and 2021, the avoided CO_2e emissions were, respectively, 978.79 tCO2e, 1.912.45 tCO2e, 542.91 tCO2e[18] and 927.85 tCO2e [19].

The methodology used to estimate the annual avoided GHG emissions, derived from the use of Tenerife's tramway, consists in comparing (difference) two scenarios, the contrafactual scenario and the real scenario. It is based on a set of assumptions that are included in Annex I.

The **contrafactual scenario** represents the scenario that would have taken place if the tramway did not exist[20]. Before the implementation of Tenerife's tramway, there were bus lines, propriety of TITSA[21], that covered the route that currently covers the tramway. We assume that people

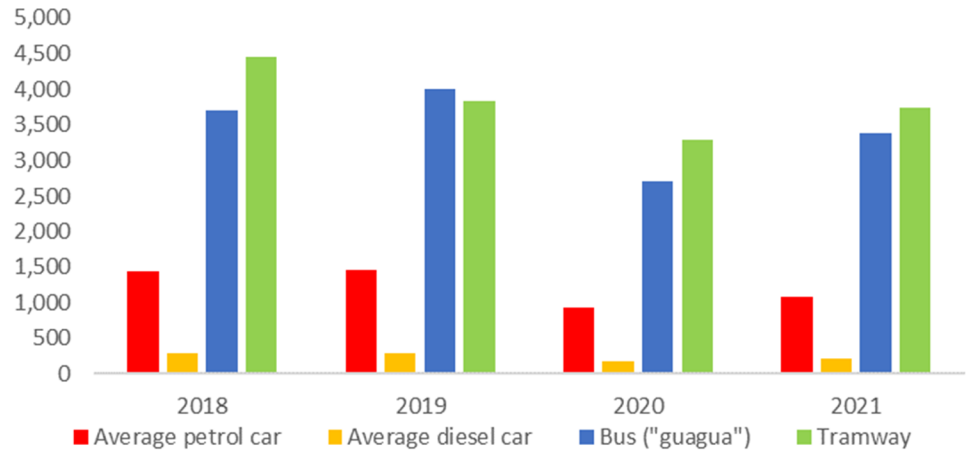
[17] We estimate scope 2 GHG emissions, i.e. the indirect GHG emissions associated to the generation of the electricity consumed by Metrotenerife.
[18] Note that this data point, corresponding to 2020, is biased due to the influence of the Covid-19 in displacements. The number of trips has been partially recovered in 2021.
[19] The avoided emissions of 2021 have been estimated on the basis of the energy consumed in 2014. The reason is that there was a failure on the electricity meter of the electricity provider, so that the registered data for the consumption of electricity in 2021 was smaller than the actual electricity consumed. The datapoint corresponding to 2014 was the closest year to 2021, in terms of number of passengers (see related figures in Section 4.1).
[20] Since the contrafactual can not be observed, it is necessary to construct this state of the world making a set of assumptions.
[21] https://titsa.com/index.php

could either take the bus ("guagua"), take a private petrol car, take a private diesel car[22], or do not generate GHG emissions[23] (this option includes people that use a bicycle, walk or do not make the trip). In this scenario, we estimate the GHG emissions that would be produced if the annual users of the tramway used these alternative means of transport (in a proportionate share). In brief, this estimation derives from the product of the number of trips per year, the average distance of each trip and the corresponding emissions factor.

The **real scenario** considers that the tramway does exist and estimate the GHG emissions derived from its operation[24]. This estimation derives from the product of the annual energy consumed by the traction of the tramway times the corresponding emissions factor.

The evolution of the CO_2e emissions of each means of transport is represented in *Figure 8* for the period considered (2018-2021).

Figure 8. *Evolution of the CO_2e emissions (tCO_2e) of each means of transport*.



Source: Metrotenerife, Afi

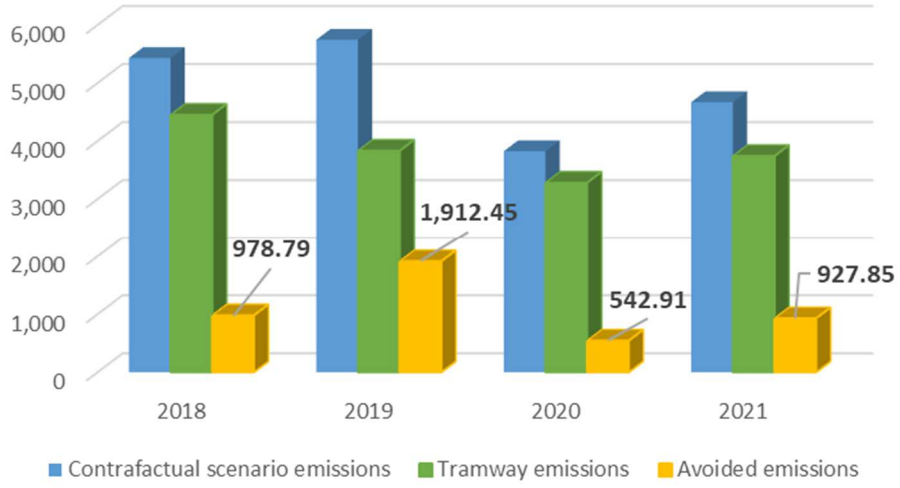
The estimated annual GHG emissions is the result of the subtraction between the GHG emissions generated in the contrafactual scenario (petrol car, diesel car, bus), minus those generated in the real scenario (tramway).

$$\mathrm{tCO2}\frac{\text{avoided}}{\text{year}} = \mathrm{tCO2}\frac{\text{contrafactual scenario}}{\text{year}} - \mathrm{tCO2}\frac{\text{tramway}}{\text{year}}$$

[22] Petrol or diesel cars include cars but also taxis, motorcycles and other similar means of transport.
[23] If this particular group of people was displaced by tramway, then GHG emissions would increase.
[24] This means that the energy used for other purposes different from the traction of the tramway, such as the energy used in the building that serves as workshop and garage of the light rail infrastructure, is subtracted from the total energy consumed.

Thus, the **average of the estimated annual GHG emissions avoided**, for the period 2018-2021, is **1,090.50 tCO_2e**. The results are displayed in *Figure 9*.

Figure 9. Evolution of CO_2e emissions in each scenario and estimation of the avoided emissions (tCO_2e)



Source: Metrotenerife, Afi

Annex I

The methodology used to estimate the annual avoided GHG emissions, derived from the use of Tenerife's tramway, is based on the following set of assumptions:

- The distance traveled by each passenger is the same, regardless of the means of transport used if the tramway did not exist. The data used (3,84km/trip) is the average between 2019 and 2021[25] and is assumed to be constant during all the time periods (2018-2021).
- GHG emissions factor of the private vehicles (petrol, diesel) and of the bus ("guagua") are deemed constant in time. This is mainly due to the lack of reliable data.
- In order to consider the preferences of the citizens over the different means of transport, we have taken the mobility data of 2008 (*Plan Territorial Especial de Ordenación del Transporte de Tenerife*, 2008) and 2021 (provided by Metrotenerife), and interpolate for the years included in that period.
- Gross emissions, rather than net emissions, have been estimated, which means that the accounting of net sinks is excluded (carbon capture minus emissions).

[25] 2020 was not included in the average because it is not a representative year of the usual commercial operation of the tramway.

REFERENCES

Climate Bonds Initiative (2022): Sustainable debt market.
https://www.climatebonds.net/resources/reports/2022

ICMA (2018): Green Bond Principles.

https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/green-bond-principles-gbp/

ICMA et al. (2020): Handbook. Harmonized Framework for Impact Reporting. The Green Bond Principles.

https://www.icmagroup.org/assets/documents/Sustainable-finance/2021-updates/Handbook-Harmonised-Framework-for-Impact-Reporting-June-2021-100621.pdf

Ministerio de Transporte, Movilidad y Agencia Urbana: Historic evolution of the share of vehicles by fuel type.
https://www.mitma.gob.es/transporte_terrestre

Metrotenerife: *Memorias anuales*.

https://metrotenerife.com/nuestra-empresa/

Metrotenerife: *Cuentas anuales*.
https://transparencia.metrotenerife.com/economico-financiera/indicador/1091-cuentas-anuales-que-deban-rendirse-por-la-entidad-balance-cuenta-de-resultado-economico-patrimonial-memoria-y-liquidacion-del-presupuesto/

Plan Territorial Especial de Ordenación del Transporte de la Isla de Tenerife (PTEOTT).

Red Eléctrica de España, REE: emission factors
https://www.ree.es/es/datos/generacion/no-renovables-detalle-emisiones-CO2

SMMT (Society of Motor Manufacturers and Traders): emission factors. Based on: 2015 Government GHG Conversion Factors for Company Reporting.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/507942/Emission_Factor_Methodology_Paper_-_2015.pdf