

Second-Party Opinion

TPG Green Bond Framework

Evaluation Summary

Sustainalytics is of the opinion that the Transports publics genevois (TPG) Green Bond Framework is credible and impactful and aligns with the four core components of the Green Bond Principles 2021. This assessment is based on the following:



USE OF PROCEEDS The eligible category for the use of proceeds, Clean Transportation, is aligned with those recognized by the Green Bond Principles. Sustainalytics considers that investments in the eligible category will lead to positive environmental impacts and advance the UN Sustainable Development Goals, specifically SDGs 9 and 11.



PROJECT EVALUATION / SELECTION TPG's Green Bond Committee will manage the internal process for evaluating and selecting projects. The Green Bond Committee will select the projects in adherence with TPG's social and environment risk management practices, internal policies, external certifications and Cantonal/Federal legislation Sustainalytics considers the project selection process to be in line with market practice.



MANAGEMENT OF PROCEEDS TPG intends to fully allocate proceeds within 36 months and has defined 24 months as the look-back period for refinancing of projects. Unallocated proceeds will be temporarily invested in cash or cash equivalents in the Canton of Geneva's cash pooling system. TPG's Treasurer will be responsible for the managing and tracking of proceeds via a cash flow monitoring system. This is in line with market practice.



REPORTING TPG intends to report on the allocation of proceeds on its website on an annual basis until full allocation. The allocation reporting will include the total amount of proceeds allocated, the balance of unallocated proceeds, the share of financing versus refinancing, and the geographical distribution of eligible projects and assets. In addition, TPG is committed to reporting on relevant impact metrics. TPG has also committed to an independent review of its annual reporting, which is in line with best market practice. Sustainalytics views TPG's allocation and impact reporting as aligned with market practice.

Evaluation Date August 26, 2022

Issuer Location Geneva,
Switzerland

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Introduction

Transports publics genevois (“TPG” or the “Company”) is a public transportation company that operates most of the public transportation systems in the Canton of Geneva as well as across the border in two departments in France.¹ Founded in 1977, TPG is an autonomous state-owned transportation company that operates trams, trolleybuses, minibuses and buses for passenger transportation. The Company is headquartered in the Canton of Geneva and employs around 2,100 people.²

TPG has developed the Green Bond Framework (the “Framework”) under which it intends to issue green bonds and use the proceeds to finance and refinance, in whole or in part, existing and future projects that will deliver environmental benefits to support TPG’s strategy and vision. The Framework defines eligibility criteria in one area:

1. Clean Transportation

TPG engaged Sustainalytics to review the Green Bond Framework, dated August 2022, and provide a Second-Party Opinion on the Framework’s environmental credentials and its alignment with the Green Bond Principles 2021 (GBP).³ This Framework has been published in a separate document.⁴

Scope of work and limitations of Sustainalytics’ Second-Party Opinion

Sustainalytics’ Second-Party Opinion reflects Sustainalytics’ independent⁵ opinion on the alignment of the reviewed Framework with the current market standards and the extent to which the eligible project categories are credible and impactful.

As part of the Second-Party Opinion, Sustainalytics assessed the following:

- The Framework’s alignment with the Green Bond Principles 2021, as administered by ICMA;
- The credibility and anticipated positive impacts of the use of proceeds; and
- The alignment of the issuer’s sustainability strategy and performance and sustainability risk management in relation to the use of proceeds.

For the use of proceeds assessment, Sustainalytics relied on its internal taxonomy, version 1.11.4, which is informed by market practice and Sustainalytics’ expertise as an ESG research provider.

As part of this engagement, Sustainalytics held conversations with various members of TPG’s management team to understand the sustainability impact of their business processes and the planned use of proceeds, as well as the management of proceeds and reporting aspects of the Framework. TPG representatives have confirmed that: (1) they understand it is the sole responsibility of TPG to ensure that the information provided is complete, accurate and up to date; (2) they have provided Sustainalytics with all relevant information; and (3) any provided material information has been duly disclosed in a timely manner. Sustainalytics also reviewed relevant public documents and non-public information.

This document contains Sustainalytics’ opinion of the Framework and should be read in conjunction with that Framework.

Any update of the present Second-Party Opinion will be conducted according to the agreed engagement conditions between Sustainalytics and TPG.

Sustainalytics’ Second-Party Opinion, while reflecting on the alignment of the Framework with market standards, is no guarantee of alignment nor warrants any alignment with future versions of relevant market standards. Furthermore, Sustainalytics’ Second-Party Opinion addresses the anticipated impacts of eligible projects expected to be financed with bond proceeds but does not measure the actual impact. The measurement and reporting of the impact achieved through projects financed under the Framework is the

¹ Transports Publics Genevois, at: <https://www.bloomberg.com/profile/company/1010Z:SW>

² “Interview with Chair of Board, TPG”, at: <https://untoday.org/genevas-public-transportation-in-a-pandemic-world/>

³ The Green Bond Principles are administered by the International Capital Market Association and are available at <https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>.

⁴ The Green Bond Framework is available on TPG’s website at: <https://www.tpg.ch/fr>

⁵ When operating multiple lines of business that serve a variety of client types, objective research is a cornerstone of Sustainalytics and ensuring analyst independence is paramount to producing objective, actionable research. Sustainalytics has therefore put in place a robust conflict management framework that specifically addresses the need for analyst independence, consistency of process, structural separation of commercial and research (and engagement) teams, data protection and systems separation. Last but not the least, analyst compensation is not directly tied to specific commercial outcomes. One of Sustainalytics’ hallmarks is integrity, another is transparency.

responsibility of the Framework owner. Upon twenty-four (24) months following the evaluation date stated herein, TPG is encouraged to update the Framework, if necessary, and seek an update to the Second-Party Opinion to ensure ongoing alignment of the Framework with market standards and expectations.

In addition, the Second-Party Opinion opines on the potential allocation of proceeds but does not guarantee the realised allocation of the bond proceeds towards eligible activities.

No information provided by Sustainalytics under the present Second-Party Opinion shall be considered as being a statement, representation, warrant or argument, either in favour of or against, the truthfulness, reliability or completeness of any facts or statements and related surrounding circumstances that TPG has made available to Sustainalytics for the purpose of this Second-Party Opinion.

Sustainalytics' Opinion

Section 1: Sustainalytics' Opinion on the Green Bond Framework

Sustainalytics is of the opinion that the TPG Green Bond Framework is credible and impactful and aligns with the four core components of the GBP. Sustainalytics highlights the following elements of TPG's Green Bond Framework:

- Use of Proceeds:
 - The eligible category, Clean Transportation, is aligned with those recognized by the GBP. Sustainalytics considers that the expenditures under the eligible category are expected to reduce emissions from the transportation system in the Geneva region and deliver environmental benefits.
 - Under the Clean Transportation category, the Company intends to finance investments in the acquisition and renovation of low-carbon public transport vehicles such as electric buses, trolleybuses and electric trams. The Company has confirmed that all the financed investments will be towards vehicles with zero tailpipe emissions. The expenditures may also include retrofitting electric buses, trolleybuses and electric trams with operation and passenger information assistance systems, on-board computer equipment, Wi-Fi antennas, ticket dispensers and other necessary retrofits that would aid in running the buses in TPG's network.
 - Additionally, TPG may finance supporting infrastructure dedicated to the operation of electric vehicles, including charging stations for electric vehicles, electric highways and electric grid upgrades that support the installation of electric charging points, as well as infrastructure and installations dedicated to urban and suburban public passenger transport, including signalling systems. The Company has confirmed to Sustainalytics that the infrastructure and installations for the urban and suburban public passenger transport system will be solely dedicated to supporting the operations of electric buses, trolleybuses and trams.
 - TPG commits to not finance or refinance any projects related to the purchase of vehicles linked to fossil fuels or assets already financed by another financier or operator.
 - Based on the above, Sustainalytics views the expenditures under this category as aligned with market practices.
- Project Evaluation and Selection:
 - TPG's Green Bond Committee (the "Committee") will be responsible for identifying, evaluating, selecting and providing the final approval for selected eligible projects in line with the Framework criteria.
 - The Committee is presided over by the Chief Financial Officer, and it comprises the Treasurer, Head of Risk Enterprise Management/Risk Manager, Environmental Officer, Head of Engineering – Buildings and Equipment, and Head of Engineering – Vehicles.
 - The Committee reviews the investments pre-selected by the Treasurer in adherence to TPG's environmental and social risk management practices, including internal policies, external certifications and Cantonal/Federal legislation. The Committee finally decides about the eligibility of the project for that year on the basis of these elements. It will also validate any changes to the framework in line with developments in TPG's projects.
 - Based on the cross-functional oversight for project selection and the presence of risk management processes, Sustainalytics considers these elements in line with market practice.
- Management of Proceeds:
 - TPG's Treasurer is responsible for managing and tracking the allocation of the net proceeds using an already established internal cash flow monitoring system.

- TPG intends to fully allocate proceeds within 36 months of issuance. The Company has also established 24 months as a look-back period for the refinancing of projects.
- Unallocated proceeds will be integrated into the Canton of Geneva's cash pooling system, in the form of cash or cash equivalents for TPG's current cash management. The Company has confirmed that this cash or cash equivalents will not be used for funding carbon-intensive activities.
- TPG commits to reallocate proceeds, if or when a certain project becomes ineligible or is postponed or cancelled, to eligible projects at the earliest possibility and in accordance with the Framework.
- Based on the use of a tracking system and disclosure of temporary use of proceeds, Sustainalytics considers this process to be in line with market practice.
- Reporting:
 - TPG commits to publish an Allocation report and an Impact report on its website annually until full allocation of all green issuances or until TPG's green bonds cease to exist in the market. The allocation report will include the following information: total amount of proceeds allocated to eligible green projects with a breakdown of allocation by project sub-category, allocation by geography, share of financing versus refinancing, and the balance of unallocated proceeds.
 - In addition to the Allocation report, the Company is committed to reporting on relevant impact metrics per eligible category through an impact report, which may include GHG emissions per passenger-kilometres travelled, total GHG emission reductions, reduction of air pollutants, number of buses/trams deployed, and percentage of kilometres travelled using electrical energy versus total travelled kilometres.
 - Based on these commitments to both impact and allocation reporting, Sustainalytics considers this process to be in line with market practice. TPG has also committed to an independent review of its annual reporting, which is in line with best market practice.

Alignment with Green Bond Principles 2021

Sustainalytics has determined that the Green Bond Framework aligns with the four core components of the GBP. For detailed information please refer to Appendix 1: Green Bond/Green Bond Programme External Review Form.

Section 2: Sustainability Strategy of TPG

Contribution of framework to Transports publics genevois' sustainability strategy

Sustainalytics is of the opinion that TPG demonstrates its commitment to sustainability through its environmental pillars, focused on five key areas: (i) water, (ii) energy, (iii) air, (iv) waste, and (v) noise.⁶ Sustainalytics highlights pillars (ii) and (iii) as the most relevant to the projects that may be financed under the Framework.

TPG's fleet is composed of 476 vehicles, 51% of which are electric vehicles powered by 100% renewable energy as of August 2022.⁷ The company aims to have a fleet of 100% electric vehicles by 2030. Under TPG's air pillar, it has implemented 12 TOSA buses,⁸ which have enabled the saving of more than 70 tonnes of CO₂. The fleet of light service vehicles, which comprises vans, minibuses and intervention cars is being renewed with the purchase of electric vehicles to achieve the objective of 130 g of CO₂ emissions per km on average by 2022 of Switzerland's Federal Department of the Environment, Transport, Energy and Communications.

Under the energy pillar, TPG has set a short-term objective to save 516,334 kWh per year by 2026, from 2017 as a base year, with annual intermediate objectives.⁹ In 2021, TPG exceeded its annual energy savings target for the fourth consecutive year, by achieving savings of 316,358 kWh relative to 2017.¹⁰ The three public vehicle maintenance centres in Geneva, Bachet-de-Pesay, La Jonction site and En Chardon are equipped with photovoltaic power stations. The La Jonction site produces approximately 220 MWh of electricity per year and supplies electricity directly to TPG's electric vehicle networks. The Company's newest centre En Chardon

⁶ TPG, "Major Achievements by Environmental Pillars", at: <https://www.tpg.ch/en/major-achievements-environmental-pillars>

⁷ Updated data on vehicles was shared privately by TPG with Sustainalytics

⁸ TOSA buses "Trolleybus Optimisation Système Alimentation" (Trolleybus Power System Optimization) is a 100% electric bus system, with a rechargeable battery.

TPG, "Innovation", at: <https://www.tpg.ch/en/nous-connaitre/tpg-aujourd'hui-et-demain/innovation>

⁹ TPG has shared the "Rapport Annuel AEnEC 2021" with Sustainalytics confidentially..

¹⁰ Ibid.

has been labelled Minergie¹¹ and generated around 1 GWh per year in 2021, allowing the Company's trolleybuses to travel nearly 100,000 km per year and trams to travel more than 50,000 km.¹²

Sustainalytics is of the opinion that the Green Bond Framework is aligned with the Company's overall sustainability strategy and initiatives and will further its action on its key environmental priorities.

Approach to managing environmental and social risks associated with the projects

While Sustainalytics recognizes that the net proceeds from the bond(s) issued under the Framework will be directed towards eligible projects that are expected to have positive environmental impact, Sustainalytics is aware that such eligible projects could also lead to negative environmental and social outcomes. Some key environmental and social risks associated with the eligible projects could include worker health and safety, and waste management related to end of life of batteries and vehicles.

Sustainalytics is of the opinion that TPG can manage and mitigate potential risks through implementation of the following:

- TPG has a risk management policy including environmental and social risks, where each risk is assessed based on its potential environmental impact. The policy is based on the ISO 31000 standard. All potential risks to which the Company is exposed are managed by the risk manager, mandated by the *Direction Générale*, which ensures that risks are identified, assessed and reassessed periodically by the business line departments and provides methodological support to risk respondents. In addition, the Company is certified under the ISO 14001 standard for environmental management systems through which it aims to limit the environmental impact of its operations, taking into consideration (among other things) energy use, waste, and air pollution.¹³
- Regarding risks related to worker health and safety, Switzerland's Code of Obligations and Labour Act addresses labour rights, including worker health and safety.¹⁴ In addition, the Canton of Geneva has strong human and labour rights legislation in place, supervised by the *Direction générale de l'office cantonal de l'inspection et des relations du travail* (Cantonal Office of Labour Inspection and Relations).¹⁵
- Article 10a to 10d of the Federal law of 7 October 1983 on the protection of the environment requires environmental impact studies for each instance of new facility construction or modification of existing installations.¹⁶
- With regard to waste management for end-of-life batteries and vehicles, each of TPG's sites is equipped with a waste collection centre, which enables all waste to be sorted and recycled. The Company recycles the various parts dismantled from a vehicle when it reaches the end of its life and must be removed from the network.¹⁷ In addition, TPG has established internal procedures, including a waste management cockpit and a waste management plan, which is used for tracking waste generation, transport and disposal and set out actions for the Company to take in order to reduce, recover and reuse its waste.

Based on these policies, standards and assessments, Sustainalytics is of the opinion that TPG has implemented adequate measures and is well positioned to manage and mitigate environmental and social risks commonly associated with the eligible category of Clean Transportation.

Section 3: Impact of Use of Proceeds

The use of proceeds category is aligned with those recognized by the GBP and is relevant in the local context.

¹¹ TPG, "Centres de maintenances", at : <https://www.tpg.ch/fr/nous-connaitre/tpg-aujourd'hui-et-demain/centres-de-maintenance>

¹² TPG, "Major Achievements by Environment Pillars", at: <https://www.tpg.ch/en/major-achievements-environmental-pillars#the-energy>

¹³ TPG, "Certificat ISO 14001", at: <https://www.tpg.ch/sites/default/files/2021-09/Certificat-ISO-14001.pdf>

¹⁴ Confédération Suisse, "Législation sur le travail", (2021), at : <https://www.ch.ch/fr/droit-du-travail/>

¹⁵ Republic and Canton of Geneva, "OCIRT - Direction générale de l'office cantonal de l'inspection et des relations du travail", at : <https://www.ge.ch/organisation/ocirt-direction-generale-office-cantonal-inspection-relations-du-travail>

¹⁶ Confédération Suisse, "Directive de la Confédération sur l'étude de l'impact sur l'environnement", (2009), at : https://www.vd.ch/fileadmin/user_upload/organisation/dse/sg-dse/fichiers_pdf/Manuel_EIE_1_.pdf

¹⁷ TPG, "Major Achievements by Environmental Pillars – The Waste", at: <https://www.tpg.ch/en/major-achievements-environmental-pillars#the-waste>

Impact of decarbonizing the transportation sector in Switzerland

In Switzerland, the transport sector accounted for 31.4% of the country's overall emissions in 2020, representing 13,577 ktCO₂e.^{18,19} The Swiss Government has set climate targets to reach net zero by 2050, with an intermediate target of reducing GHG emissions by at least 50% by 2030 based on 1990 levels.²⁰ To achieve this target, Switzerland has established a long-term climate strategy that requires land transport to no longer generate GHG emissions by 2050.²¹ A roadmap to promote electric mobility was signed by the Swiss Confederation, the Cantons, Communes and industries, with the goal of raising the share of electric vehicles among newly registered automobiles to 15% by 2022.²²

The Canton of Geneva has also set targets to reduce GHG emissions by 60% by 2030. Under the *Plan climat cantonal 2030 – 2ème generation* (Cantonal climate plan 2030 – 2nd generation), the city of Geneva has established *La Stratégie Mobilité 2030* (The 2030 Mobility Strategy). Among other goals, this sets specific objectives concerning public transport as part of its *Plan d'actions des transports collectifs* (Public transport action plan).^{23,24} The targets under this action plan include reducing the average kilometres travelled by individual motorized transport (IMT) to 10% and achieving an electrification rate of approximately 40% of the remaining vehicle fleet. To achieve the 2030 GHG target for transport, 40-50% of IMT trips will have to be switched to other lower-emission modes of transport or be eliminated.²⁵ Furthermore, the public transport action plan includes a 2024 target of 52% of the kilometres travelled by Geneva public transport vehicles to be via electric vehicles, such as trams and trolleys (up from 36% in 2018).²⁶

In addition to CO₂, the transportation sector contributes to emitting other air pollutants such as fine particulate matter (PM_{2.5}) particulate matter (PM₁₀), nitrogen oxide (NO_x), volatile organic compounds (VOC) and ammonia (NH₃).^{27,28} In 2020, emissions from the transportation sector accounted for 30% of Switzerland's PM₁₀ emissions and 58% of NO_x emissions.²⁹ The air of Geneva is considered moderately polluted and above the maximum limit established for one year by the WHO.^{30,31} In particular, the annual average concentration of PM_{2.5} in Geneva is 9 µg/m³, exceeding the WHO's threshold of 5 µg/m³, and the annual average concentration of NO₂ is 16 µg/m³, which also surpasses the WHO's limit of 10 µg/m³.^{32,33} Air pollution is one of the greatest environmental threats to human health³⁴ and was responsible for 500,000 deaths in the European region in 2021.³⁵ Reducing transport emissions will therefore help mitigate climate change, improve air quality and protect people's health.³⁶

Based on the above context, Sustainalytics is of the opinion that TPG's financing of clean transportation projects can provide positive environmental and social benefits and contribute to the achievement of Switzerland's and the Canton of Geneva's climate and transport targets.

¹⁸ Confédération Suisse, "Latest greenhouse gas inventory of Switzerland", at:

<https://www.bafu.admin.ch/bafu/en/home/topics/climate/state/data/climate-reporting/latest-ghg-inventory.html>

¹⁹ International aviation is excluded and has been indicated separately in Switzerland's GHG inventory.

²⁰ UNFCCC, "Switzerland's information necessary for clarity, transparency and understanding in accordance with decision 1/CP.21 of its updated and enhanced nationally determined contribution (NDC) under the Paris Agreement (2021 – 2030)", (2021), at:

https://unfccc.int/sites/default/files/NDC/2022-06/Swiss%20NDC%202021-2030%20incl%20ICTU_December%202021.pdf

²¹ Confédération Suisse, "Long-term climate strategy to 2050", (2022), at: <https://www.bafu.admin.ch/bafu/en/home/topics/climate/info-specialists/emission-reduction/reduction-targets/2050-target/climate-strategy-2050.html>.

²² Ibid.

²³ Republic and Canton of Geneva, "Plan climat cantonal 2030 – 2ème generation", (2021), at: <https://www.ge.ch/document/24973/telecharger>

²⁴ Republic and Canton of Geneva, "Plan d'actions des transports collectifs", (2019), at: <https://www.ge.ch/document/15619/telecharger>

²⁵ Republic and Canton of Geneva, "Plan climat cantonal 2030 – 2ème generation", (2021), at: <https://www.ge.ch/document/24973/telecharger>

²⁶ Republic and Canton of Geneva, "Plan d'actions des transports collectifs", (2019), at: <https://www.ge.ch/document/15619/telecharger>

²⁷ Confédération Suisse, "Impact sur l'environnement", at: <https://www.bfs.admin.ch/bfs/fr/home/statistiques/mobilite-transports/accidents-impact-environnement/impact-environnement.html>

²⁸ EEA, "Contribution of the transport sector to total emissions of the main air pollutants", (2021), at: <https://www.eea.europa.eu/data-and-maps/indicators/transport-emissions-of-air-pollutants-8/>

²⁹ Confédération Suisse, "Impact sur l'environnement", at: <https://www.bfs.admin.ch/bfs/fr/home/statistiques/mobilite-transports/accidents-impact-environnement/impact-environnement.html>

³⁰ Plume Labs, "What are the Plume AQI pollution thresholds?", at: <https://plumelabs.zendesk.com/hc/en-us/articles/360008409333>

³¹ Plume Labs, "Air Quality of Geneva", at: <https://air.plumelabs.com/air-quality-in-Geneva-ba9E>.

³² Ibid.

³³ WHO, "WHO Air Quality Guidelines Levels Are Lower Than 15 Years Ago", (2021), at:

<https://who.canto.global/v/LOJV1PH4GO/album/LFSA6?viewIndex=0&column=image&id=17n1tbkefd0dp7qn3gt8ns3o6v>

³⁴ WHO, "New WHO Global Air Quality Guidelines aim to save millions of lives from air pollution", (2021), at: <https://www.who.int/news/item/22-09-2021-new-who-global-air-quality-guidelines-aim-to-save-millions-of-lives-from-air-pollution>

³⁵ WHO, "Air pollution – The Silent Killer", at:

<https://who.canto.global/v/LOJV1PH4GO/album/LFSA6?viewIndex=0&column=image&id=2cpr9juhd93p997k94d9ieep2b>

³⁶ WHO, "Reducing Air Pollution And Mitigating Climate Change, Together Help To Protect Our Health", (2021), at:

<https://who.canto.global/v/LOJV1PH4GO/album/LFSA6?viewIndex=0&column=image&id=fifod9u8lh3pbfvpvupij9ag5f>

Alignment with/contribution to SDGs

The Sustainable Development Goals (SDGs) were set in September 2015 by the United Nations General Assembly and form part of an agenda for achieving sustainable development by 2030. The bonds issued under the Framework are expected to help advance the following SDGs and targets:

Use of Proceeds Category	SDG	SDG target
Clean Transportation	9. Industry, Innovation, and Infrastructure	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.
	11. Sustainable Cities and Communities	11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.

Conclusion

TPG has developed the Green Bond Framework under which it may issue green bonds and use the proceeds to finance clean transportation projects. Sustainalytics considers that the projects funded by the green bond proceeds are expected to provide a positive environmental impact. The Green Bond Framework outlines a process for tracking, allocating and managing proceeds, and makes commitments for TPG to report on the allocation and impact of the use of proceeds. Furthermore, Sustainalytics believes that the Green Bond Framework is aligned with the overall sustainability strategy of the Company and that the use of proceeds is expected to contribute to the advancement of the UN Sustainable Development Goals 9 and 11. Additionally, Sustainalytics is of the opinion that TPG has adequate measures to identify, manage and mitigate environmental and social risks commonly associated with the eligible projects funded by the proceeds.

Based on the above, Sustainalytics is confident that Transports publics genevois is well positioned to issue green bonds and that the Green Bond Framework is robust, transparent and in alignment with the four core components of the Green Bond Principles 2021.

Appendix

Appendix 1: Green Bond / Green Bond Programme - External Review Form

Section 1. Basic Information

Issuer name:	Transports publics genevois
Green Bond ISIN or Issuer Green Bond Framework Name, if applicable:	TPG Green Bond Framework
Review provider's name:	Sustainalytics
Completion date of this form:	August 26, 2022
Publication date of review publication:	
Original publication date <i>[please fill this out for updates]</i>	

Section 2. Review overview

SCOPE OF REVIEW

The following may be used or adapted, where appropriate, to summarise the scope of the review.

The review assessed the following elements and confirmed their alignment with the GBP:

- | | |
|--|--|
| ☒ Use of Proceeds | ☒ Process for Project Evaluation and Selection |
| ☒ Management of Proceeds | ☒ Reporting |

ROLE(S) OF REVIEW PROVIDER

- | | |
|---|--|
| ☒ Consultancy (incl. 2 nd opinion) | ☐ Certification |
| ☐ Verification | ☐ Rating |
| ☐ Other <i>(please specify)</i> : | |

Note: In case of multiple reviews / different providers, please provide separate forms for each review.

EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW *(if applicable)*

Please refer to Evaluation Summary above.

Section 3. Detailed review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

1. USE OF PROCEEDS

Overall comment on section (*if applicable*):

The eligible category for the use of proceeds Clean Transportation, is aligned with those recognized by the Green Bond Principles. Sustainalytics considers that investments in the eligible category will lead to positive environmental impacts and advance the UN Sustainable Development Goals, specifically SDG 9 and 11.

Use of proceeds categories as per GBP:

- | | |
|---|--|
| ☐ Renewable energy | ☐ Energy efficiency |
| ☐ Pollution prevention and control | ☐ Environmentally sustainable management of living natural resources and land use |
| ☐ Terrestrial and aquatic biodiversity conservation | ☒ Clean transportation |
| ☐ Sustainable water and wastewater management | ☐ Climate change adaptation |
| ☐ Eco-efficient and/or circular economy adapted products, production technologies and processes | ☐ Green buildings |
| ☐ Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBP | ☐ Other (<i>please specify</i>): |

If applicable please specify the environmental taxonomy, if other than GBP:

2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (*if applicable*):

TPG's Green Bond Committee will manage the internal process for evaluating and selecting projects. The Green Bond Committee will select the projects in adherence with TPG's social and environment risk management practices, internal policies, external certifications and Cantonal/Federal legislation. Sustainalytics considers the project selection process to be in line with market practice.

Evaluation and selection

- | | |
|---|--|
| ☒ Credentials on the issuer's environmental sustainability objectives | ☐ Documented process to determine that projects fit within defined categories |
|---|--|

- | | |
|--|--|
| ☒ Defined and transparent criteria for projects eligible for Green Bond proceeds | ☐ Documented process to identify and manage potential ESG risks associated with the project |
| ☐ Summary criteria for project evaluation and selection publicly available | ☐ Other (<i>please specify</i>): |

Information on Responsibilities and Accountability

- | | |
|---|---|
| ☐ Evaluation / Selection criteria subject to external advice or verification | ☒ In-house assessment |
| ☐ Other (<i>please specify</i>): | |

3. MANAGEMENT OF PROCEEDS

Overall comment on section (*if applicable*):

TPG intends to fully allocate proceeds within 36 months and has defined 24 months as the lookback period for refinancing of projects. Unallocated proceeds will be temporarily invested in cash or cash equivalents in the Canton of Geneva's cash pooling system. TPG's Treasurer will be responsible for the managing and tracking of proceeds via a cash flow monitoring system. This is in line with market practice.

Tracking of proceeds:

- | |
|---|
| ☒ Green Bond proceeds segregated or tracked by the issuer in an appropriate manner |
| ☒ Disclosure of intended types of temporary investment instruments for unallocated proceeds |
| ☐ Other (<i>please specify</i>): |

Additional disclosure:

- | | |
|--|---|
| ☐ Allocations to future investments only | ☒ Allocations to both existing and future investments |
| ☐ Allocation to individual disbursements | ☐ Allocation to a portfolio of disbursements |
| ☐ Disclosure of portfolio balance of unallocated proceeds | ☐ Other (<i>please specify</i>): |

4. REPORTING

Overall comment on section (*if applicable*):

TPG intends to report on the allocation of proceeds on its website on an annual basis until full allocation. The allocation reporting will include the total amount of proceeds allocated, the balance of unallocated proceeds, the share of financing versus refinancing, and the geographical distribution of eligible projects and assets. In addition, TPG is committed to reporting on relevant impact metrics. TPG has also committed to an

independent review of its annual reporting, which is in line with best market practice. Sustainalytics views TPG's allocation and impact reporting as aligned with market practice.

Use of proceeds reporting:

- | | |
|--|--|
| ☐ Project-by-project | ☒ On a project portfolio basis |
| ☐ Linkage to individual bond(s) | ☐ Other (<i>please specify</i>): |

Information reported:

- | | |
|---|--|
| ☒ Allocated amounts | ☐ Green Bond financed share of total investment |
| ☒ Other (<i>please specify</i>): allocation by geography, share of financing versus refinancing, and the balance of unallocated proceeds. | |

Frequency:

- | | |
|---|--------------------------------------|
| ☒ Annual | ☐ Semi-annual |
| ☐ Other (<i>please specify</i>): | |

Impact reporting:

- | | |
|--|--|
| ☐ Project-by-project | ☒ On a project portfolio basis |
| ☐ Linkage to individual bond(s) | ☐ Other (<i>please specify</i>): |

Information reported (expected or ex-post):

- | | |
|--|---|
| ☐ GHG Emissions / Savings | ☐ Energy Savings |
| ☐ Decrease in water use | ☒ Other ESG indicators (<i>please specify</i>): GHG emissions per passenger kilometres travelled, total GHG emission reductions, reduction of air pollutants, number of buses/trams deployed, and percentage kilometre travelled in electrical energy versus total travelled kilometre. |

Frequency

- | | |
|---|--------------------------------------|
| ☒ Annual | ☐ Semi-annual |
| ☐ Other (<i>please specify</i>): | |

Means of Disclosure

- | | |
|--|---|
| ☐ Information published in financial report | ☐ Information published in sustainability report |
| ☐ Information published in ad hoc documents | ☒ Other (please specify): Allocation and Impact reporting |
| ☒ Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review): Allocation and Impact reporting | |

Where appropriate, please specify name and date of publication in the useful links section.

USEFUL LINKS (e.g. to review provider methodology or credentials, to issuer's documentation, etc.)

SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE

Type(s) of Review provided:

- | | |
|--|--|
| ☐ Consultancy (incl. 2 nd opinion) | ☐ Certification |
| ☐ Verification / Audit | ☐ Rating |
| ☐ Other (<i>please specify</i>): | |

Review provider(s):

Date of publication:

ABOUT ROLE(S) OF INDEPENDENT REVIEW PROVIDERS AS DEFINED BY THE GBP

- i. Second-Party Opinion: An institution with environmental expertise, that is independent from the issuer may issue a Second-Party Opinion. The institution should be independent from the issuer's adviser for its Green Bond framework, or appropriate procedures, such as information barriers, will have been implemented within the institution to ensure the independence of the Second-Party Opinion. It normally entails an assessment of the alignment with the Green Bond Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability, and an evaluation of the environmental features of the type of projects intended for the Use of Proceeds.
- ii. Verification: An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or environmental criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Green Bond proceeds, statement of environmental impact or alignment of reporting with the GBP, may also be termed verification.
- iii. Certification: An issuer can have its Green Bond or associated Green Bond framework or Use of Proceeds certified against a recognised external green standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.

Green Bond Scoring/Rating: An issuer can have its Green Bond, associated Green Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialised research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental performance data, the process relative to the GBP, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material environmental risks.

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