SECOND PARTY OPINION (SPO)

Sustainability Quality of the Issuer and Green, Social, and/or Sustainability Bond Framework

Ville de Geneve
18 October 2023

VERIFICATION PARAMETERS

Type(s) of instruments contemplated
- Green Bonds, Social Bonds, and Sustainability Bonds
- Green Bond Principles (GBP), as administered by the International Capital Market Association (ICMA) (as of June 2021 with June 2022 Appendix 1),
- Social Bond Principles (SBP), as administered by the International Capital Market Association (ICMA) (as of June 2023 with June 2023 Appendix 1)
- Sustainability Bond Guidelines as administered by the International Capital Market Association (ICMA) (as of June 2021)

Relevant standards

Scope of verification
- Ville de Geneve Green, Social, and/or Sustainability Bond Framework (as of September 28, 2023)
- Ville de Geneve Eligibility Criteria (as of September 28, 2023)

Lifecycle
- Pre-issuance verification

Validity
- Valid as long as the cited Framework remains unchanged
SCOPE OF WORK

Ville de Geneve (“the Issuer” or “the City of Geneva”) commissioned ISS Corporate Solutions (ICS) to assist with its Green, Social, and Sustainability Bonds by assessing three core elements to determine the sustainability quality of the instruments. The Framework assessed for this SPO was provided in French as it is the only legally binding version of the Framework. The assessment of the Framework was based on our English translation; thus, the wording may not be an exact reflection of Ville de Geneve’s official English translation of the Framework:

1. Ville de Geneve’s Green, Social, and/or Sustainability Bond Framework (as of September 28, 2023) – benchmarked against the International Capital Market Association’s (ICMA) ICMA Green Bond Principles, Social Bond Principles, and Sustainability Bond Guidelines (GBP).

2. The Eligibility Criteria – whether the project categories contribute positively to the United Nations Sustainable Development Goals (UN SDGs) and how they perform against proprietary issuance-specific key performance indicators (KPIs) (See Annex 1).

3. Linking the transaction(s) to Ville de Geneve’s overall Environmental, Social, and Governance (ESG) profile – drawing on the issuance-specific Use of Proceeds (UoP) categories.
## ASSESSMENT SUMMARY

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<thead>
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<th>SPO SECTION</th>
<th>SUMMARY</th>
<th>EVALUATION</th>
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<tr>
<td>Part 1: Alignment with GBP/SBP/SBG</td>
<td>The Issuer has defined a formal concept for its Green Bonds, Social Bonds, and Sustainability Bonds regarding use of proceeds, processes for project evaluation and Eligibility, management of proceeds, and reporting. This concept is in line with the ICMA Green Bond Principles, Social Bond Principles, and Sustainability Bond Guidelines.</td>
<td>Aligned</td>
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<tr>
<td></td>
<td>The Green Bonds, Social Bonds, and Sustainability Bonds will (re)finance eligible asset categories which include:</td>
<td></td>
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<td></td>
<td>Green categories: Renewable Energy, Energy Efficiency (renovation), Energy Efficiency (construction), Sustainable Mobility, Adaptation to Climate Change</td>
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<tr>
<td></td>
<td>Social categories: Access to Essential Services (education), and Access to Affordable Housing</td>
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<tr>
<td></td>
<td>Product and/or service-related use of proceeds categories(^2) individually contribute to one or more of the following SDGs:</td>
<td>Positive</td>
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<td></td>
<td>Part 2: Sustainability quality of the Eligibility Criteria</td>
<td></td>
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<tr>
<td></td>
<td>Process-related use of proceeds categories(^3) individually improve (i) the Issuer’s operational impacts on one or more of the following SDGs:</td>
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<tr>
<td></td>
<td>The environmental and social risks associated with those use of proceeds categories are managed.</td>
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</tbody>
</table>

\(^1\) The evaluation is based on the Ville de Genève’s Green and Social Bond Framework (September 2023 version), on the analysed eligibility criteria as received on September 28, 2023, and on the ISS ESG Country Rating for Switzerland updated on July 21, 2023 and applicable at the SPO delivery date.

\(^2\) Renewable Energy, Access to Essential Services, and Access to Affordable Housing.

\(^3\) Energy Efficiency (Renovation), Energy Efficiency (Construction), Sustainable Mobility, and Adaptation to Climate Change.
**Part 3: Linking the transaction(s) to Ville de Geneve’s ESG profile**

The key sustainability objectives and the rationale for issuing Green Bonds, Social Bonds, and Sustainability Bonds are clearly described by the Issuer. All of the project categories considered are in line with the sustainability objectives of the Issuer.

At the date of publication of the report and leveraging ISS ESG Research, the Issuer’s country is exposed to the controversy of using nuclear for more than 10% of total primary energy supply (TPES), no decision on abandoning nuclear power but there is a moratorium on nuclear power plants^4.

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^4 The City of Geneva is taking measures to prevent nuclear proliferation, specifically: the city has opened a legal case to fight the legitimacy of a nuclear plan in the surroundings (France, centrale du Bugey) as it can demonstrate indirect damage, and the city contracted with its sole energy supplier (SIG) a green contract with the guarantee of origin for electricity (only green and renewables: hydroelectric, solar and wind), nuclear is excluded. An audit certificate is issued yearly by SIG.
This section evaluates the alignment of the Ville de Geneve’s Green, Social, and/or Sustainability Bond Framework (as of September 28, 2023) with the ICMA Green Bond Principles, Social Bond Principles, and Sustainability Bond Guidelines.

<table>
<thead>
<tr>
<th>ICMA GREEN BOND PRINCIPLES, SOCIAL BOND PRINCIPLES, AND SUSTAINABILITY BOND GUIDELINES</th>
<th>ALIGNMENT</th>
<th>OPINION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Use of Proceeds</td>
<td>✓</td>
<td>The Use of Proceeds description provided by Ville de Geneve’s Green, Social, and/or Sustainability Bond Framework is aligned with the ICMA Green Bond Principles, Social Bond Principles, and Sustainability Bond Guidelines. The Issuer’s green and social categories align with the project categories as proposed by the ICMA Green Bond Principles, Social Bond Principles, and Sustainability Bond Guidelines. Criteria are defined in a clear and transparent manner. Disclosure of an allocation period and commitment to report by project category has been provided and environmental and social benefits are described. The Issuer defines exclusion criteria for harmful project categories in line with best market practices.</td>
</tr>
<tr>
<td>2. Process for Project Evaluation and Selection</td>
<td>✓</td>
<td>The Process for Project Evaluation and Selection description provided by Ville de Geneve’s Green, Social, and/or Sustainability Bond Framework is aligned with the ICMA Green Bond Principles, Social Bond Principles, and Sustainability Bond Guidelines. The project Selection process is defined and structured in a congruous manner. ESG risks associated with the project categories are identified and managed through an appropriate process. Moreover, the projects selected show alignment with the sustainability strategy of the Issuer and clearly show the intended benefit to the relevant population.</td>
</tr>
<tr>
<td>3. Management of Proceeds</td>
<td>✓</td>
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<tr>
<td><strong>In the context of the project selection and evaluation, the Issuer explains who is considered accountable and responsible for what, and has internal and external expertise, including departments other than Treasury, in line with best market practices.</strong></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Reporting</th>
<th>✓</th>
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</thead>
</table>
| **The Management of Proceeds provided by Ville de Geneve’s Green, Social, and/or Sustainability Bond Framework is aligned with the ICMA Green Bond Principles, Social Bond Principles, and Sustainability Bond Guidelines.**  
  The net proceeds collected will be equal to the amount allocated to eligible projects, with no exceptions. The net proceeds are tracked in an appropriate manner and attested in a formal internal process. The net proceeds are managed per bond (bond-by-bond approach). Moreover, the Issuer discloses the temporary investment instruments for unallocated proceeds.  
  The Issuer disclosed an allocation period of 24 months in line with best market practice.** |

<table>
<thead>
<tr>
<th>4. Reporting</th>
<th>✓</th>
</tr>
</thead>
</table>
| **The allocation and impact reporting provided by Ville de Geneve’s Green, Social, and/or Sustainability Bond Framework (as of September 28, 2023) is aligned with the ICMA Green Bond Principles, Social Bond Principles, and Sustainability Bond Guidelines.**  
  The Issuer commits to disclose the allocation of proceeds transparently and to report in an appropriate frequency. The reporting will be publicly available on the Issuer’s website. Ville de Geneve explains that the level of expected reporting will be at project category level and the type of information that will be reported. Moreover, the Issuer commits to report annually, until the proceeds have been fully allocated.  
  The Issuer commits to provide impact reports and discloses the level of reporting, the information reported, frequency, scope, and duration. The Issuer provides transparency on the roles and responsibilities in the monitoring and reporting process.** |
PART II: SUSTAINABILITY QUALITY OF THE ELIGIBILITY CRITERIA

A. CONTRIBUTION OF THE GREEN BONDS, SOCIAL BONDS, AND SUSTAINABILITY BONDS TO THE UN SDGs

Sub Sovereign can contribute to the achievement of the SDGs by providing specific services/products which help address global sustainability challenges, and by being responsible actors, working to minimize negative externalities in their operations along the entire value chain. The aim of this section is to assess the SDG impact of the UoP categories financed by the Issuer in two different ways, depending on whether the proceeds are used to (re)finance:

- specific products/services,
- improvements of operational performance.

1. Products and services

The assessment of UoP categories for (re)financing products and services is based on a variety of internal and external sources, such as the ISS ESG SDG Solutions Assessment (SDGA), a proprietary methodology designed to assess the impact of an Issuer’s products or services on the UN SDGs, as well as other ESG benchmarks (the EU Taxonomy Climate Delegated Acts, the ICMA Green and/or Social Bond Principles and other regional taxonomies, standards and sustainability criteria).

The assessment of UoP categories for (re)financing specific products and services is displayed on a 3-point scale (see Annex 1 for methodology):

<table>
<thead>
<tr>
<th>Use of Proceeds (Products/Services)</th>
<th>Contribution or Obstruction</th>
<th>Sustainable Development Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Renewable Energy</strong></td>
<td></td>
<td>17 Automotive and clean energy</td>
</tr>
<tr>
<td>Financing of the construction, maintenance, and/or operation of renewable energy production/distribution facilities of the City of Geneva that meet the following technical eligibility criteria:</td>
<td>Contribution</td>
<td></td>
</tr>
<tr>
<td>- Photovoltaic solar panels that meet the following technical eligibility criteria: Manufactured in Europe and having a carbon intensity &lt; 50 eq. -CO₂/KWh over its entire life cycle.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The impact of the UoP categories on UN Social Development Goals is assessed with proprietary methodology and may therefore differ from the Issuer’s description in the framework.
- Connection to structuring heating networks: Structuring heating networks supplied at least 55% with renewable energy (and 80% by 2030);
- Heat pumps (PAC) that meet the following technical eligibility criteria: GSP certified heat pumps (with EHPA international quality certificate or national quality certificate)
- Recovery of energy from waste heat a) refrigeration systems and b) centralized ventilation systems, for heating and domestic hot water (DHW) production that meet the following technical eligibility criteria:<sup>6,7</sup>
  a) Systematic implementation with delayed yield according to the season and adapted to the specific needs of the site,
  b) Double-flow ventilation: minimum heat recovery efficiency of 70%; Hydro-adjustable single flow ventilation (A or B)

### Sustainable Mobility:

*Acquisition, construction, operation, or maintenance of infrastructure, equipment, or rolling stock:*

- For public passenger transport (e.g., development around tracks and stations)

### Energy Efficiency (Construction)<sup>8</sup>:

*Construction expenditures to increase the number of energy-efficient buildings and projects to increase energy savings and efficiency:*

- Energy-efficient buildings that meet the following eligibility criteria: Constructions and extensions at least in accordance with the

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<sup>6</sup> Ville de Genève has communicated to ICS that financing for this activity will be directed toward the GeniLac project, which is the largest hydrothermal network built in Geneva. The project is entirely powered by renewable electricity.

<sup>7</sup> Ville de Genève’s Green Bond Framework notes the exclusion of waste incineration in this category.

<sup>8</sup> The Issuer confirmed that projects funded under this category will be both products/services and process improvements.
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THPE-2000W standard (MOPEC or CECB variant)\(^9\)

Eligible projects will be achieving the minimum energy requirements of the Minergie certification.

Adaptation to Climate Change

Financing of the acquisition, construction, or operation/maintenance of infrastructure, equipment, and developments, in the public domain, for one or more of the following purposes:

- Increased canopy (e.g., planting in urban areas and parks, tree renewal) that meet the following eligibility criteria: Criteria - defined on the basis of the environmental impact analyses carried out and the social impacts collected -, formalized in the Strategic Plan for Revegetation 2030 (PSV+) and the Arborization Strategy (STAR)

Social Categories

<table>
<thead>
<tr>
<th>USE OF PROCEEDS (PRODUCTS/SERVICES)</th>
<th>CONTRIBUTION OR OBSTRUCTION</th>
<th>SUSTAINABLE DEVELOPMENT GOALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to Essential Services (Education)</td>
<td>Contribution</td>
<td></td>
</tr>
</tbody>
</table>

Expenditures related to the provision of free or affordable access to quality childcare and educational services:

- Financing of the acquisition, construction, or expansion (CAPEX) of primary schools and extracurricular spaces;
- Financing of the acquisition, construction, or expansion of childcare facilities (e.g., crèches);

\(^9\) Regulations Implementing the Energy Act detail the following criteria for new buildings: New buildings with the Minergie® label or any other equivalent label with a clean electricity production rate of at least 10W/m² of energy reference surface are considered to meet a high energy performance standard. Are certified as high energy performance new buildings whose recovery of the thermal envelope by a rate of own production of electricity is at least 10W/ m² of energy reference surface, of which the recovery of the roof by the installation of solar thermal collectors covers at least 30% of the heat needs for domestic hot water, the main heat supply of which comes from non-fossil and local energies or from a remote thermal network whose share of energies non-fossil and local is at least 50%, and which meet one of the following alternatives:

A) compliance with the limit values of the weighted annual energy requirements for heating, the preparation of domestic hot water, ventilation, and cooling in the buildings to be constructed defined in the model of energy requirements of the cantons of 2014 (ci -after: MoPEC 2014), compliance with the limit values of standard SIA 380/1 edition 2016 for heat requirements for heating and compliance with limit values relating to overall energy demand defined by standard SIA 387/4 edition 2017 edition for lighting;

b) obtaining energy class B/B according to the cantonal energy certificate for buildings accompanied by an advisory report (hereinafter: CECB Plus) or the technical specifications SIA 2031 2016 edition and, if the building is not intended for housing and that it is air-conditioned, the electrical power required for air conditioning not exceeding 7W/m² of air-conditioned surface;

c) compliance with 80% of the limit values of standard SIA 380/1 edition 2016 for heat requirements for heating, compliance with target values relating to overall energy demand defined by standard SIA 387/4 edition 2017 for lighting and, if the building is not intended for housing and is air-conditioned, not exceeding the electrical power required for air conditioning of 7W/m² of air-conditioned surface.

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- Financing of the acquisition, construction, or expansion of toy libraries or community centres.

Target Population:
- Unemployment individuals
- Women and/or sex or gender minorities
- Vulnerable elderly or youth populations

The Framework also identifies excluded and/or marginalized populations and/or communities as the target population.

Access to Affordable Housing
Expenditures related to the financing of affordable access to quality housing services in the City of Geneva:

- Financing of investments made by the City of Geneva (CAPEX), for the acquisition of land or buildings, the construction or renovation of social housing or Public Utility Housing (“LUP”) buildings.
- Grants/endowments by the City of Geneva to foundations responsible for LUP.

Target Population
- People eligible for social assistance; OR
- Excluded and/or marginalized populations and/or communities.
- People whose income does not exceed the limits and according to the number of family members.

Access to Affordable Housing
Expenditures related to the financing of affordable access to quality housing services in the City of Geneva:

- Financing of investments made by the City of Geneva (CAPEX), for housing intended for emergency accommodation.

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10 Social housing managed by the City of Geneva are subject to the "Regulations governing the rental conditions for social housing in the City of Geneva".
11 Public Utility Housing is a housing assistance scheme in the City of Geneva that provides low-cost, low-rent, mixed, student, and cooperative housing to the identified target populations.
12 Persons eligible for social assistance are defined in the Law on Integration and Individual Social Assistance (LIASI) and the Implementing Regulations of the Law on Integration and Individual Social Assistance (RIASI)
13 Ville de Geneve defines excluded and/or marginalized communities as people who lack social and financial resources, including housing, and unemployment.
14 Ville de Geneve has communicated to ICS that financing towards emergency accommodation will target the homeless people under the “zero homeless” policy.
2. **Improvements of operational performance (processes)**

The below assessment aims at qualifying the direction of change (or “operational impact improvement”) resulting from the operational performance projects (re)financed by the UoP categories, as well as related UN SDGs impacted. The assessment displays how the UoP categories are mitigating the exposure to the negative externalities relevant to the business model and the sector of the Issuer.

The table below aims at displaying the direction of change resulting from the operational performance improvement projects. The outcome displayed does not correspond to an absolute or net assessment of the operational performance.

<table>
<thead>
<tr>
<th>USE OF PROCEEDS</th>
<th>OPERATIONAL IMPACT IMPROVEMENT</th>
<th>SUSTAINABLE DEVELOPMENT GOALS</th>
</tr>
</thead>
</table>

**Energy Efficiency (Renovation):**

Expenses to reduce energy consumption and greenhouse gas (GHG) emissions from public buildings and facilities in the City of Geneva.

- Complete or major renovation of buildings (e.g., administrations, schools, etc.), and community facilities (e.g., community lighting, swimming pools, ice rinks, gymnasiums, etc.) that meet the following eligibility criteria:

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15 Persons eligible for social assistance are defined in the Law on Integration and Individual Social Assistance (LIASI) and the Implementing Regulations of the Law on Integration and Individual Social Assistance (RIASI).

16 Ville De Geneve defines excluded and/ or marginalized communities as people who lack social and financial resources, including housing, and unemployment.

17 Limited information is available on the scale of the improvement as no threshold is provided. Only the direction of change is displayed.
Minimum renovations in accordance with the HPE-Renovation standard (MOPEC or CECB variant)\textsuperscript{18}

Partial renovation of buildings and/or public facilities of the City of Geneva to lower the threshold of the heat expenditure index (GUI) of buildings above 450MJ/m\textsuperscript{2} through:\textsuperscript{19}

\begin{itemize}
\item[a)] Installation of double glazing for all buildings owned by the City of Geneva
\item[b)] Roof renovation, including any of the following: (i) Roof insulation, and (ii) Revegetation of building roofs, etc.) and installation of photovoltaic solar panels (cf. renewable energy)
\end{itemize}

The partial renovation expenditures meet the following eligibility criteria:

\begin{itemize}
\item Quality roof insulation U≤0.20W/m\textsuperscript{2}K
\item Use of the entire surface of flat roofs for the development of combined strategies of greening and photovoltaic solar energy production (variable ratio depending on the specific layout of the building – on average up to 50% surface area for the installation of photovoltaic panels).
\item Partial or complete energy renovation through the acquisition of land and/or buildings and/or equipment.
\end{itemize}

\textsuperscript{18} Regulations Implementing the Energy Act detail the following criteria for renovated buildings: Renovated buildings with the benefit of the Minergie\textsuperscript{®} Rénovation label or any other equivalent label with a clean electricity production rate of at least 20W/m\textsuperscript{2} of the building surface are considered to meet a high energy performance standard. Footprint of the building. Renovated buildings are certified as being of high energy performance, for which the recovery of the thermal envelope by a rate of clean electricity production is at least 20W/m\textsuperscript{2} of the footprint of the building, the recovery of which of the roof by installing solar thermal collectors covers at least 30% of the heat needs for domestic hot water, the main heat supply of which comes from non-fossil and local energies or from a remote thermal network whose the share of non-fossil and local energies is at least 50%, and which meet one of the following alternatives:
\begin{itemize}
\item[a)] compliance with the limit values for the weighted annual energy requirements for heating, preparation of domestic hot water, ventilation, and cooling in the buildings to be constructed defined in the MoPEC 2014 increased by 70%, and compliance limit values of the SIA 380/1 standard edition 2016 for heat requirements for heating increased by 50%;
\item[b)] obtaining energy class C/B according to CECB Plus or according to the technical specifications SIA 2031, 2016 edition and, if the building is not intended for housing and is air-conditioned, not exceeding the electrical power required for air conditioning of 12W/m\textsuperscript{2} of air-conditioned surface. Republique et Canton De Geneve, "Regulations Implementing the Energy Act", (2023), at: https://silgeneve.ch/legis/index.aspx
\end{itemize}

\textsuperscript{19} Ville de Geneve has identified this GUI threshold as a part of the Energy Act Regulations in Geneva, which dictates that buildings with a GUI > 450MJ/m\textsuperscript{2} require optimization measures. Santandrea Expert Energie, "What is the IDC?", at: https://santandrea-expert-energie.ch/en/diagnostic-energetique-en-suisse-romande/calcule-de-lidc/#:~:text=Expressed%20in%20megajoules%20per%20square%20foot%20of%20the%20year%20in%20question
Energy Efficiency (Construction):

Construction expenditures to increase the number of energy-efficient buildings and projects to increase energy savings and efficiency:

- Energy-efficient buildings that meet the following eligibility criteria: Constructions and extensions at least in accordance with the ThPE-2000W standard (MOPEC or CECB variant)\(^{21}\)

Eligible projects will be achieving the minimum energy requirements of the Minergie certification.

Sustainable Mobility:

Acquisition, construction, operation, or maintenance of infrastructure, equipment or rolling stock:

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\(^{20}\) Ville de Genève has confirmed that only renovation expenditures will be financed within this expenditure.

\(^{21}\) Regulations Implementing the Energy Act detail the following criteria for new buildings: New buildings with the Minergie\(^{®}\) label or any other equivalent label with a clean electricity production rate of at least 10W/m\(^2\) of energy reference surface are considered to meet a high energy performance standard. Are certified as high energy performance new buildings whose recovery of the thermal envelope by a rate of own production of electricity is at least 10W/m\(^2\) of energy reference surface, of which the recovery of the roof by the installation of solar thermal collectors covers at least 30% of the heat needs for domestic hot water, the main heat supply of which comes from non-fossil and local energies or from a remote thermal network whose share of energies non-fossil and local is at least 50%, and which meet one of the following alternatives:

A) compliance with the limit values of the weighted annual energy requirements for heating, the preparation of domestic hot water, ventilation, and cooling in the buildings to be constructed defined in the model of energy requirements of the cantons of 2014 (ci -after: MoPEC 2014), compliance with the limit values of standard SIA 380/1 edition 2016 for heat requirements for heating and compliance with limit values relating to overall energy demand defined by standard SIA 387/4 2017 edition for lighting;

b) obtaining energy class B/B according to the cantonal energy certificate for buildings accompanied by an advisory report (hereinafter: CECB Plus) or the technical specifications SIA 2031 2016 edition and, if the building is not intended for housing and that it is air-conditioned, the electrical power required for air conditioning not exceeding 7W/m\(^2\) of air-conditioned surface;

c) compliance with 80% of the limit values of standard SIA 380/1 edition 2016 for heat requirements for heating, compliance with target values relating to overall energy demand defined by standard SIA 387/4 edition 2017 for lighting and, if the building is not intended for housing and is air-conditioned, not exceeding the electrical power required for air conditioning of 7W/m\(^2\) of air-conditioned surface.

For soft modes of transport (e.g., bike paths, bridges, bicycle garages, pedestrian spaces)

For the electrification of the City of Geneva’s fleet of technical vehicles and service vehicles and corresponding equipment (e.g., electric charging stations) that meet one or more of the following eligibility criteria:

- light-duty vehicles and ultra-low CO\textsubscript{2} emission vehicles (e.g., hydrogen, fuel cell, electric)
- passenger vehicles with emissions <50 g CO\textsubscript{2} eq./p-km (until 2025)

For the electrification of the City of Geneva’s fleet of technical vehicles and service vehicles and corresponding equipment (e.g., electric charging stations) that meet the following eligibility criteria in line with the Climate Bond Initiative’s Taxonomy: light-duty freight vehicles with emissions <21 g CO\textsubscript{2} eq./p-km (until 2030) and <18 g CO\textsubscript{2} eq./p-km (until 2050)

Adaptation to Climate Change

Financing of the acquisition, construction, or operation/maintenance of infrastructure, equipment, and developments, in the public domain, for one or more of the following purposes:

- De-waterproofing and renaturation of soils and public spaces that meet the following eligibility criteria: Removal or relocation of impermeable coating by permeable coating or vegetation; Strategic principles systematically integrated into specific projects or measures implemented in the context of coordination of work on the public domain; Nature management corrections.
- Optimization of public lighting that meets the eligibility criteria: Implementation of the Lighting Plan II in line with the Cantonal Energy Plan 2020-2030

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22 Ville de Geneve has confirmed to ICS that the bridges financed will only include infrastructure for biking and pedestrians.
B. MANAGEMENT OF ENVIRONMENTAL & SOCIAL RISKS ASSOCIATED WITH THE ELIGIBILITY CRITERIA

Green, Social, and Sustainability Bonds

The table below evaluates the Eligibility Criteria against issuance-specific KPIs. All of the assets are/will be located in Switzerland.

<table>
<thead>
<tr>
<th>ASSESSMENT AGAINST KPIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental and social risks relevant for all project categories</td>
</tr>
<tr>
<td><strong>Biodiversity</strong></td>
</tr>
</tbody>
</table>

Ville de Geneve has policies in place ensuring Environmental Impact Assessments (EIA) are performed. An EIA is carried out for projects to be in line with national or regional laws, such as the Federal Act on the Protection of the Environment. Furthermore, specific environmental standards are applicable to eligible project categories. For example, the Federal Act on the Protection of Nature and Cultural heritage is applied across all cantons and ensures the protection of heritage landscapes and sites, the promotion of the conservation of biological diversity and conservation of indigenous flora and fauna among others. In addition, there are specific federal and regional regulations to protect the natural habitat and biodiversity, such as the Federal Act on Fisheries and the Federal Act on Hunting and the protection of Wild Mammals and Birds.

At the cantonal level, most demolition, construction or installation work, extensions, renovations or changes of use require a building permit, via the “Loi sur les constructions et les installations diverses (LCI)” (or “Law on constructions and various installations”). Facilities likely to have a significant impact on the environment, to the extent that compliance with environmental provisions can probably only be guaranteed by project- or site-specific measures, are subject to an EIA. The list of facilities subject to an EIA is defined by the Federal Council in the appendix to the “Ordonnance relative à l’Étude de l’Impact sur l’Environnement (OEIE)” (or “Ordinance on Environmental Impact Assessment”). An EIA is always carried out as part of a decisive federal or cantonal authorization procedure. In order to protect biodiversity, Ville de Genève relies on cantonal regulations governing public procurement, as well as on the Geneva 2030 Biodiversity Strategy. All investment projects are subject to a building permit, which is analyzed, reviewed and validated by the various departments of the cantonal administration such as the “Office cantonal de l’agriculture et de la nature (OCAN)” (or “Cantonal Office of Agriculture and Nature”), “Directions générales de l’eau (DGEau)” (or “General water departments”), or “Office cantonal de l’énergie (OCEN)” (or “Cantonal Energy Office”). The impact on biodiversity is therefore covered at cantonal level.

Ville de Geneve has policies in place ensuring biodiversity considerations when it comes to public procurement. Ville de Geneve is currently drawing up its biodiversity strategy (expected completion in 2024). As part of its general greening strategy, Ville de Geneve also relies on federal regulations regarding the choice of plants to be avoided (blacklist).
or endangered species to be reintroduced or protected (red list). At the city level, each investment project requires the validation of the municipality council and is described in a detailed document (named PR) in which the potential impact on biodiversity is determined (when applicable). For example, the transformation of an area in the city (PLQ: Plan localisé de quartier) will systematically include a section on biodiversity. In such transformation project, any potential improvement of biodiversity is explored and proposed when feasible.

Circular Economy

Ville de Geneve has policies in place ensuring end-of-life commissioning, take back and recycling of products. The Swiss Confederation’s legal framework includes articles that ensure recycling and end-of-life commissioning are applied to assets financed under this framework, including measures for the prevention, reduction, recovery, and safe treatment and disposal of waste. Notably, the federal “Ordonnance Fédérale sur la Limitation et l’Elimination des Déchets (OLED)” (or “Ordinance on the Avoidance and Disposal of Waste”) states that cantons shall ensure that the recoverable parts of municipal waste are collected separately and recycled. Likewise, the proprietors of waste from businesses with 250 or more full-time employment positions must collect and recycle the recoverable parts of their waste that are similar in their composition to municipal waste. As such, waste is sorted up-stream in in Switzerland, with waste then being sent to outlets for recycling according to type.

Waste Management

Ville de Geneve has policies in place ensuring the reduction of hazardous waste and pollution prevention. The Swiss Confederation’s legal Framework ensures that hazardous waste is monitored and treated appropriately and that processes are in place to prevent pollution. A comprehensive set of measures have been put in place so that polluted sites are remediated if they lead to harmful impact or nuisances or if there is a specific risk that such impacts will occur, as well as regulation on the disposal of waste and circulation of environmentally hazardous substances, for example through the “Loi Fédérale sur la Protection de l’Environnement (LPE)” (or “Federal Act on the Protection of the Environment”). At the City level, Ville de Geneve is implementing a number of measures aimed at reducing the production of waste that has an impact on the environment. To this end, the City of Geneva is increasing the number of accessible ‘ecopoints’, raising awareness among residents and encouraging the reduction of waste produced by businesses. For instance, a ban on the use of single-use plastic products for authorized activities in public spaces has applied to events, markets, terraces of public establishments and seasonal installations since January 1, 2020.

Labour, health and safety

All assets or projects (re)financed are or will be located in Switzerland, where high labour, health and safety standards are ensured by the relevant national legislation.

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23 Waste bins where residents can sort their wastes in different categories to be recycled. Ville de Geneve is investing in and mandating the systematic installation of such collection points in any new development area.
Community dialogue

Ville de Geneve has policies in place ensuring that there is a process in place to identify potential controversies associated with the potential investments and how those controversies are mitigated. Individual investment projects follow a process involving relevant stakeholders, including the department initiating the project, the Administrative Council and the City of Geneva Council (also working in sub-committees). The various projects are therefore studied and reviewed according to different axes (sectors, public policies, themes, political axes). Meanwhile, Ville de Genève holds public meetings with residents and/or local residents who may be affected by certain projects, to explain the sequence of work and the added value of the projects down the line. Certain comments are also considered in the design of projects to minimize the number of potential appeals.

Users’ Safety – Products

Ville de Geneve has policies in place ensuring that health and safety standards are in place for consumers of products. User safety of the assets or projects (re)financed is covered via federal and cantonal legislation. At the federal level 930.11 Loi fédérale sur la sécurité des produits (LSPr) and 814.41 Ordonnance sur la production contre le bruit, and at the cantonal level, K 1.03 Loi sur la santé (07.04.2006) cover user safety.

Inclusion

Ville de Geneve has policies in place promoting inclusion and non-discriminatory access, referencing fairly priced and/or subsidised participation for socially disadvantaged groups. Ville de Genève offers a wide range of social services and benefits (e.g., back-to-school allowance, subsidies for soft mobility, local social policy, cantonal emergency accommodation scheme managed by the City of Geneva, etc.). These services are implemented by the “Département de la Cohésion Sociale et de la Solidarité (DCSS)” (or

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24 The target populations include: Unemployed individuals; women and/or sex or gender minorities; vulnerable elderly or youth populations; people living below the poverty line; excluded and/or marginalized populations and/or communities; people whose income does not exceed the limits and according to the number of family members.
“Department of Social Cohesion and Solidarity”), whose actions are structured around eight priorities:

- meeting the needs of pre-school, school and extracurricular activities, in order to guarantee the care and rights of all children;
- reform early childhood governance to achieve gender equality and meet the needs of families;
- strengthen youth policy to prevent social breakdown;
- build a long-life policy to combat the isolation and precariousness of the elderly;
- refocus local social policy to meet the needs of the population;
- develop social information to facilitate access to benefits and combat non-use;
- set up a permanent emergency accommodation system to help combat homelessness;
- support accessibility and inclusion to combat all forms of discrimination.

Quality Management

Ville de Genève’s Financial Controller, in their capacity of internal auditor, verifies that the City of Geneva complies with the Law on the Administration of Communes (LAC) and with auditing and revision standards (NAS-890). In addition, minimum quality of service required is defined in each department and for each service rendered. For instance, in the case of childcare: the amount of supervision (number of puericulture professionals) and qualification (diploma and experience), number of beneficiaries compared to requests, etc. The minimum quality of service required is audited by an independent internal auditor regularly to ensure high standard of service.

Ethics

Ville de Genève provides all its employees with mandatory training in internal control and risk management. Likewise, the Personnel Regulations contain provisions concerning respect for the interests of the City of Geneva and the behavior expected of employees, such as a zero-tolerance policy for the acceptance of any benefits. Ville de Genève also has a directive on conflicts of interest with specific rules to exclude certain individuals from the tender process when potential conflicts of interest arise.

In addition, the City of Geneva is developing an Ethics Charter.

Water

While there is no policy to ensure high standards in water management on the municipal level (Ville de Geneve), there are policies available at the federal and cantonal level. At the federal level, the Federal Council adopted a report on water supply security and water management drawn up by the Federal Office of the environment (FOEN), which recommends that cantons manage water at regional level and measure current consumption in greater detail. At the cantonal level, The Office cantonal de l’eau (OCeau) and partners are responsible for sustainable preservation of sustainable preservation of
the various water cycles, the services provided by aquatic ecosystems and regulating withdrawal and discharge (lake and watercourses), notably through the “Loi sur les Eaux” L2 05 (or “Law on Water”). For renewable energy infrastructures, energy efficiency (renovation/construction) and climate change adaptation projects, cantonal legislation defines water management services and the documents to be included, depending on the project, in the building permit application file, thus ensuring that water management legislation is taken into account and complied with. At the municipal level, Ville de Geneve applies cantonal legislation on water management to the operations of the municipal administration (internal), as well as to its projects linked to the development of renewable energies, energy efficiency (renovation/construction) and adaptation to climate change (external services).

The City of Geneva is also implementing a number of initiatives to save water, for instance, the “Service des Espaces Verts” (akin to a “Parks, and Gardens Service”), for example, draws water from the lake to water its flowerbeds, in order to reduce network water consumption.
PART III: LINKING THE TRANSACTIONS TO VILLE DE GENEVE’S ESG PROFILE

A. CONSISTENCY OF GREEN BONDS, SOCIAL BONDS, AND SUSTAINABILITY BONDS WITH VILLE DE GENEVE’S SUSTAINABILITY STRATEGY

Key sustainability objectives and priorities defined by the Issuer

In 2022 the City of Geneva established its Climate Strategy, which identified 30 strategic objectives and 78 concrete measures to address climate change, grouped into eight environmental axes and one social axis. Below are the axes and some of the associated targets:

Environmental Objectives:

- Axis 1: Consumption of Goods and Services
  - Targets: Active promotion of vegetarian and semi-vegetarian diets; development and reinforcement of anti-waste measures; sharing, rental, second hand, and repair.

- Axis 2: Energy and Buildings
  - Targets: 100% renewable energy by 2050; reduce energy consumption (-30%) and carbon footprint (-60%) of the municipal built heritage; development of solar photovoltaic on existing buildings; establishment of production chains for biosourced materials

- Axis 3: Mobility
  - Targets: Development of pedestrian areas to encourage active mobility and secure walking; conversion of parking spaces into green, pedestrian, and/or cyclist spaces; purchase of low-CO₂ powered fleet, aiming at having 50% of the fleet electric by 2030

- Axis 4: Spatial Planning
  - Targets: Establishment of wetlands in all development projects; use of floor and facade coverings that retain less heat; increase in the shaded area aiming for 30% canopy by reaching at least 25% of the municipal territory in 2030

- Axis 5: Health and Protection of the Population
  - Targets: Reduction of heat islands, to reduce inequalities relating to climate change; Equitable and rapid access to information and emergency instructions to deal with extreme climate

- Axis 6: Biodiversity and Natural Environments
  - Targets: Quadrupling the surface area of green roofs on municipal buildings by 2030; restoration of urban soils; increase of biodiversity preservation areas

- Axis 7: Mobilization of the Population
  - Targets: Encourage companies to set targets for reducing GHG emissions; enhanced, clear, and transparent information on the causes and consequences of climate change

- Axis 8: Financial Balance
  - Targets: Financing the ecological transition by issuing “green” loans; promotion of sustainable investments; green and sustainable funds for City investments

Social Objective:
• Social Justice
  ▪ Targets: Provide adequate and qualitative public infrastructures in order to meet the needs of young people and families by creating 700+ preschool education places by 2028; Fight against impoverishment and facilitate access to social benefits for residents.

Follow-up is carried out and a report is presented to the Administrative Council annually, additionally, a Carbon Footprint Report is published every five years which tracks environmental performance, with the latest being published in 2022. The objectives set by the City of Geneva are stated to be in line with the Intergovernmental Panel on Climate Change’s (IPCC) recommendations, national laws, and cantonal laws.

The identification and analysis of risks is covered by cf. Regulation LC21 133 and covers risks at different levels, such as institutional risks; trade risks; cross risks (cross-cutting services, validation: same process as for business risks); and project risks. In addition, the different types of risks are identified, considering environmental, social, and governance criteria. The City of Geneva’s Risk Manager prepares a quarterly report for the Administrative Council on the main risks identified for large-scale projects, as well as an annual risk management report. The Administrative Council is composed of five members, each assuming the presidency of a department and administering the services attached to it. The City of Geneva Council, which serves as the City of Geneva's parliament, is composed of 80 members elected for a five-year term and is responsible for adopting the operating budget, financial accounts, and voting investment credits for the city's projects.

The City of Geneva implements the United Nations Agenda 2030 by serving as a forum for formal and informal dialogue, including stakeholders focusing on topics such as human rights, health, aid for natural catastrophes, employment, and trade. The work carried out by these stakeholders contributes to achieving the SDGs. Lastly, the City of Geneva is committed to promoting sustainable development within its territory.

The issuer has never issued any Sustainable Finance Instruments before.

Rationale for issuance

The City of Geneva aims to accelerate the ecological transition through investments and increased transparency in public spending on the environment and social development. This goal includes regularly reporting progress results in the Swiss financial centre.

As part of its environmental and social commitments and strategic objectives, the City of Geneva has made a commitment to issue several green bonds by the end of the legislature, to finance the ecological transition of municipal infrastructure and buildings and properties of the City of Geneva. The proceeds will fund categories such as renewable energy, energy efficiency, clean mobility, access to essential services, and affordable housing which are categories related to the City’s sustainability strategy.

Opinion: The key sustainability objectives and the rationale for issuing Green, Social, and Sustainability Bonds are clearly described by the Issuer. All of the project categories financed are in line with the sustainability objectives of the Issuer.

B. COUNTRY’S EXPOSURE TO ESG RISKS

This section aims to provide macro-country level ESG risks and offers additional context to the issuance assessed in the present report. It leverages ISS ESG Country Rating methodology as well as relevant external sources such as United Nations Development Programme, Transparency International and Institute for Economics & Peace.

Issuer overview

Switzerland is located in Western Europe. The Issuer is a federal republic, classified as a high-income country by the World Bank. The Issuer has an estimated population of 8.4 million inhabitants as of 2020, with 73.8% of its population living in urban areas, and a level of greenhouse gas emissions per capita of 4.90 million tons as of 2020, which have decreased in recent years.

Additional information relating to the Issuer, based on international indices:

<table>
<thead>
<tr>
<th>INDEX</th>
<th>RANK, AS OF DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Development Index²⁶</td>
<td>1, in 2021</td>
</tr>
<tr>
<td>Corruption Perception Index²⁷</td>
<td>7, in 2022</td>
</tr>
<tr>
<td>Global Peace Index²⁸</td>
<td>10, in 2023</td>
</tr>
</tbody>
</table>

ESG risks associated with the Issuer and sovereign Issuers

Leveraging ISS ESG’s Country Rating methodology, key challenges faced by sovereign Issuers have been identified in terms of sustainability management as displayed in the table below. Please note, this is not an Issuer-specific assessment.

<table>
<thead>
<tr>
<th>ESG KEY ISSUES FOR SOVEREIGN ISSUERS</th>
<th>Natural resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political system and governance</td>
<td></td>
</tr>
<tr>
<td>Human Rights and fundamental freedoms</td>
<td>Climate change and energy</td>
</tr>
<tr>
<td>Social conditions</td>
<td>Product and consumption</td>
</tr>
</tbody>
</table>

Please note that the consistency between the issuance subject to this report and the Issuer’s sustainability strategy is further detailed in Part III.B of the report.

Exposure of the Issuer’s country to controversial areas

At the date of publication, the Country of the Issuer is exposed to the following areas which may be considered controversial by investors:

²⁷ Source: https://www.transparency.org/en/cpi/2021/index/fra
²⁸ Source: https://www.visionofhumanity.org/maps/#/
## Sovereign Controversial Areas

<table>
<thead>
<tr>
<th>Area</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuclear power</td>
<td>&gt; 10% of total primary energy supply (TPES), no decision on abandoning nuclear power but moratorium on Nuclear Power plants (^{29})</td>
</tr>
</tbody>
</table>

\(^{29}\) The City of Geneva is taking measures to prevent nuclear proliferation, specifically: the city has opened a legal case to fight the legitimacy of a nuclear plan in the surroundings (France, centrale du Bugey) as it can demonstrate indirect damage, and the city contracted with its sole energy supplier (SIG) a green contract with the guarantee of origin for electricity (only green and renewables: hydroelectric, solar and wind), nuclear is excluded. An audit certificate is issued yearly by SIG.
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The parent company of Institutional Shareholder Services (“ISS”), ISS HoldCo Inc., has since February 2021 been principally owned by Deutsche Börse AG (“DB”) with the remainder owned by Genstar Capital (“Genstar”) and ISS management. In April 2023, DB announced its intention to combine ISS with Qontigo, another entity controlled by DB, with General Atlantic to become the sole minority shareholder of the combined entity. The combination is expected to be completed in the third quarter of 2023. In July 2023, the stakes of Genstar and ISS management in ISS HoldCo Inc. were acquired by DB. The non-interference and similar policies implemented by ISS related to Genstar are no longer applicable and disclosures regarding Genstar and ISS management’s ownership of ISS are withdrawn.
ANNEX 1: Methodology

The ISS ESG SPO provides an assessment of labelled transactions against international standards using ISS ESG proprietary methodology. For more information, please visit: https://www.issgovernance.com/file/publications/SPO-Use-of-Proceeds-Bonds-and-Loans.pdf

ANNEX 2: ISS ESG Country Rating Methodology

ISS ESG Country Rating provides relevant and forward-looking environmental, social, and governance (ESG) data and performance assessments. For more information, please visit: https://www.issgovernance.com/file/publications/methodology/Country-Rating-Methodology.pdf
ANNEX 3: Quality Management Processes

SCOPE
Ville de Geneve commissioned ICS to compile a Green Bonds, Social Bonds, and Sustainability Bonds SPO. The Second Party Opinion process includes verifying whether the Green, Social and/or Sustainability Bond Framework aligns with the ICMA Green Bond Principles, Social Bond Principles, and Sustainability Bond Guidelines and to assess the sustainability credentials of its Green Bonds, Social Bonds, and Sustainability Bonds, as well as the Issuer’s sustainability strategy.

CRITERIA
Relevant Standards for this Second Party Opinion
▪ ICMA Green Bond Principles, Social Bond Principles, and Sustainability Bond Guidelines

ISSUER’S RESPONSIBILITY
Ville de Geneve’s responsibility was to provide information and documentation on:
▪ Framework
▪ Eligibility criteria
▪ Documentation of ESG risks management at the framework level

ICS’s VERIFICATION PROCESS
Since 2014, ISS Group, of which ICS is part, has built up a reputation as a highly-reputed thought leader in the green and social bond market and has become one of the first CBI approved verifiers.

This independent Second Party Opinion of the Green Bonds, Social Bonds, and Sustainability Bonds to be issued by Ville de Geneve has been conducted based on a proprietary methodology and in line with the ICMA Green Bond Principles, Social Bond Principles, and Sustainability Bond Guidelines.

The engagement with Ville de Geneve took place from August to October 2023.

ICS’ BUSINESS PRACTICES
ICS has conducted this verification in strict compliance with the ISS Group Code of Ethics, which lays out detailed requirements in integrity, transparency, professional competence and due care, professional behavior and objectivity for the ISS business and team members. It is designed to ensure that the verification is conducted independently and without any conflicts of interest with other parts of the ISS Group.
About this SPO

Companies turn to ISS Corporate Solutions (ICS) for expertise in designing and managing governance, compensation, sustainability and cyber risk programs that align with company goals, reduce risk, and manage the needs of a diverse shareholder base by delivering best-in-class data, tools, and advisory services.

We assess alignment with external principles (e.g. the ICMA Green / Social Bond Principles), analyse the sustainability quality of the assets and review the sustainability performance of the Issuer themselves. Following these three steps, we draw up an independent SPO so that investors are as well informed as possible about the quality of the bond / loan from a sustainability perspective.


For more information on SPO services, please contact: SPOsales@isscorporatesolutions.com

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