SECOND PARTY OPINION
ON THE SUSTAINABILITY OF THE CITY OF PARIS’ SUSTAINABILITY BOND
November 2017

SCOPE

Vigeo Eiris was commissioned to provide an independent opinion on the sustainability credentials and management of the Sustainability Bond (the “Bond”) considered to be issued by the City of Paris (the “Issuer”), according to Vigeo Eiris’ Environmental, Social and Governance (ESG) assessment methodology, in line with the Green Bond Principles, the Social Bond Principles and Sustainability Bond Guidelines (all together the “Green and Social Bond Principles”).

The opinion is based on the review of the two following components:

- Issuer: document-based evaluation of the City of Paris’ ESG performance, controversies and capacity to mitigate associated risks.
- Issuance: analysis of the coherence of the bond Framework with the City of Paris’ strategy and commitments, and document-based evaluation of the bond Framework, including but not limited to:
  - Analysis of the process for categorisation and selection of projects eligible to the use of proceeds, and the process for evaluation of their environmental and social risks and impacts.
  - Assessment of reporting systems dedicated to information, monitoring and control related to fund allocation, to management and impacts of financed projects.

Vigeo Eiris’ sources of information are gathered from our rating database, from the City of Paris data, press content providers and stakeholders, complemented by interviews with involved managers, held at the City of Paris’ offices in Paris (France). Vigeo Eiris has carried out its due diligence from July 27th, 2017 to October 31st, 2017.

We were able to access to most appropriate documents and to meet most solicited people. We consider that the provided information enable us to establish our opinions with a reasonable level of assurance on their completeness, precision and reliability.

Our due diligence only covers the Eligible Project Categories and Sub-Categories defined in the Sustainability Bond Framework dated October 30th, 2017, which will be made available on the City of Paris’ website. Vigeo Eiris recommends that the Issuer consult an external expert prior to the definition of new Sub-Categories, in order to ensure their consistency with the initial objectives of the contemplated Sustainability Bond.

VIGEO EIRIS’ OPINION

Vigeo Eiris confirms that the bond intended to be issued by the City of Paris is a “Sustainability Bond” with positive contribution to sustainable development, aligned with the Green and Social Bond Principles.

Vigeo Eiris reaches a reasonable level of assurance on the bond’s contribution to sustainability.

Issuer: the City of Paris displays an overall advanced ESG performance (see Part I).

- The City of Paris ranks first in the “Local Authorities” Vigeo Eiris sector which covers 29 European local authorities. Its performance is advanced on the Environmental and Social pillars, and good in the Governance pillar.
- The City of Paris faces 3 controversies regarding the Environment and Procurement and Services domains. Overall, the frequency is occasional, the severity is high, and the City of Paris is reactive: it communicates transparently and cooperates with interested parties or take corrective actions in most cases.

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2 The “Sustainability Bond” is to be considered as the potential forthcoming bond, which issuance is subject to market conditions.
3 www.paris.fr
4 Definition of Vigeo Eiris’ scales of assessment (as detailed on page 11 and 12 of this document):
Level of Performance: Advanced, Good, Limited, Weak.
Level of Assurance: Reasonable, Moderate, Weak.
5 The opinion delivered on stakeholder-related ESG controversies is not a conclusion on the creditworthiness of the City of Paris or its financial obligations.
6 One of these controversies is related to the condemnation, in 2013, of Jean Tiberi, a previous mayor in Paris 5th arrondissement for fraudulent voters’ registrations at 1995 and 1997 elections. The case is still active because of ongoing appeals.
• **Issuance**: The Issuer’s Sustainability Bond Framework is coherent with the City of Paris’ main ESG strategic priorities and is considered to be good (see Part II).
  - The net proceeds of the bond issuance will be used to finance and refinance Eligible Green and Social Projects, which contribute to climate change mitigation and adaptation, social and economic inclusion, in line with six United Nations Sustainable Development Goals. Objectives and expected benefits associated with the Eligible Green and Social Projects are visible, precise, relevant and measurable. The processes for categorisation, evaluation and selection of Eligible Projects are clearly defined and overall good in terms of transparency, bond governance and relevance of defined eligibility criteria.
  - The rules for the management of proceeds are clearly defined by the Issuer and would enable a documented and transparent allocation process, based on the Issuer’s commitments on the management of proceeds.
  - The Issuer is committed to report annually, publicly and until net proceeds are fully allocated. The reporting commitments and process are good, covering the fund allocation and environmental and social benefits of all selected projects (outputs and/or impacts).

Beyond the Green and Social Bond Principles, in line with international standards, certain ESG factors have been integrated in the selection, monitoring and reporting processes, covering main ESG risks related to the Eligible Projects.

**EXTERNAL REVIEW**

The City of Paris’ Sustainability Bond issuance is supported by external reviews, provided by:

- **Consultant review**: the hereby Vigeo Eiris’ review (“Second Party Opinion”), as external consultant, on the sustainability credentials of the Sustainable Bond, based on pre-issuance commitments and covering all the bond dimensions, i.e. issuer commitments, projects (use of proceeds definition and selection, and ESG integration), proceeds management and reporting (processes and indicators).
- **Verification**: an external verification of the tracking of the bond proceeds, during the fund allocation process, until the complete allocation of proceeds, by the Public Accountant and the Préfet, representing the French State.
- **Annual consultant review**: the review of the Second Party Opinion, every year and until full allocation of the Sustainability Bond’s proceeds, on the compliance with pre-issuance commitments of the City of Paris and with the Green and Social Bond Principles.

*This Opinion is valid as of the date of issuance limited to the City of Paris’ 2017 first Sustainability Bond.*

Paris, November 2nd, 2017

Muriel Caton
Director of Vigeo Eiris Enterprise

Paul Courtosier
Sustainability bonds services

Camille Ferron
Sustainability Consultant

**Disclaimer**

Transparency on the relation between Vigeo Eiris and the Issuer: Vigeo Eiris has executed 3 missions for the City of Paris (Second Party Opinion on the Climate Bond in November 2015 and review of this opinion in December 2016 and June 2017). No other established relationship (financial or other) exists between Vigeo Eiris and the City of Paris.

This opinion aims to explain for investors why the Sustainability Bond is considered as sustainable, based on the information which has been made available to Vigeo Eiris and which has been analyzed by Vigeo Eiris. Providing this opinion does not mean that Vigeo Eiris certifies the materiality, the excellence or the irreversibility of the projects financed by the Sustainability Bond. The City of Paris is fully responsible for attesting the compliance with its commitments defined in its policies, for their implementation and their monitoring. The opinion delivered by Vigeo Eiris neither focuses on financial performance of the Sustainability Bond, nor on the effective allocation of its proceeds. Vigeo Eiris is not liable for the induced consequences when third parties use this opinion either to make investments decisions or to make any kind of business transaction. The opinion delivered on stakeholder-related ESG controversies is not a conclusion on the creditworthiness of the City of Paris or its financial obligations.

Restriction on distribution and use of this Opinion: the opinion is provided by Vigeo Eiris to the Issuer and can only be used by the Issuer. The distribution and publication is at the discretion of the Issuer, submitted to Vigeo Eiris approval.
DETAILLED RESULTS

Part I. ISSUER

The City of Paris’ ESG performance level

As of December 2016, the City of Paris’ overall approach to manage ESG related issues is advanced.

<table>
<thead>
<tr>
<th>Domain</th>
<th>Comments</th>
<th>Opinion</th>
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<tbody>
<tr>
<td>Environment</td>
<td>The City of Paris’ performance in the Environment domain is stable as compared to Vigeo Eiris’ last review and continues to be considered as advanced. The City’s environmental strategy continues to be wide-ranging with targets and a year-on-year quantitative reporting on achievements. The strategy covers the issues at stake for the City as an organisation in addition to those related to environmental management on the territory. The City’s main strengths lie in its efforts to protect biodiversity and limit negative environmental impacts linked to energy use, transportation, waste generation and local nuisances. On all these issues the City appears to have wide ranging policies and adequate means in place and shows some positive trends in performance indicators. However, room for improvement remains both in terms of water management and in terms of sustaining improved trends in result indicators related to each of the environmental issues under review.</td>
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<tr>
<td>Social</td>
<td>The City of Paris’ performance in the Human Resources domain is advanced. The City’s main strengths lie in very advanced performances in the fields of career management planning and improvement of health and safety conditions. All sustainability drivers analysed in the domain show wide-ranging policies set and measures covering most relevant employees. The City of Paris’ performance in the Human Rights domain is stable as compared to the last assessment and continues to be considered as Good. The City of Paris’ performance in the Community Development domain continues to be advanced on both issues under review, ensuring: economic development, employment, vocational and the promotion of sustainable territorial planning, and, ‘Social cohesion and fair development’. The City is the sector leader.</td>
<td></td>
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<tr>
<td>Governance</td>
<td>The City of Paris’ performance in the Procurement and Services domain continues to be considered as Good. The City displays comprehensive policies to develop responsible relations with service recipients and to ensure the respect of suppliers in procurements. Despite the Good performances shown, room for improvement still remains in developing the systems in place to deal with the issues under review in the domain, and in particular the prevention of corruption throughout its activities. The City of Paris’ performance in the Governance domain has been stable since Vigeo Eiris’ last review. The City is transparent on both its efforts to ensure adequate representative democracy and the adequate ‘Audit and internal controls’ of its activities. Many participative instances have been created and the population’s participation is regularly and innovatively solicited, on a wide range of issues.</td>
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Stakeholder-related ESG controversies and Involvement in controversial activities

We have identified 3 ESG controversies on several domains:

- Procurement and Services, namely on fraudulent registration of voters by a former mayor.
- Environment, namely on noise and air quality issues.

<table>
<thead>
<tr>
<th>Domain impacted</th>
<th>Summary description</th>
<th>Last update</th>
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<tbody>
<tr>
<td>Procurement and Services</td>
<td>On March 3rd 2015, Paris appeal court (‘Cour de Cassation’) dismissed the Tiberi couple's appeal and confirmed their March 2013 condemnation. Jean Tiberi, a previous mayor in Paris 5th arrondissement, was condemned for fraudulent voters’ registrations at 1995 and 1997 elections, to 3 years of ineligibility, 10 suspended months of prison and a EUR 10,000 fine; his wife to 9 suspended months of prison and EUR 5,000 and his first deputy major to 2 years of ineligibility, 9 suspended months of prison and a EUR 1,500 fine. They have announced their intention to bring the case to the European Court of Human Rights (ECHR).</td>
<td>30/09/2015</td>
</tr>
<tr>
<td>Environment</td>
<td>In May 2015, Airparif published its 2014 report on air quality in the Ile de France Region, highlighting the harmful impacts of 16 pollution peaks days on the environment and on public health and revealing that the concentration of air pollutants has exceeded regulatory thresholds in 2014. The study shows that over 2.3 million persons living in Paris, 9 Parisians out of 10 are exposed to excessive levels of nitrogen dioxide. Near the main transportation roads, the concentration of air pollutants can exceed two times the regulatory levels. On May 15th 2015, Ecology without Borders (ESF) filed a new complaint before the ‘Tribunal de Grande Instance’ of Paris for &quot;endangering life of others&quot; and denouncing &quot;the inaction of the government&quot;. It had already launched legal proceedings against the City in 2014, but the case had been closed.</td>
<td>06/10/2015</td>
</tr>
<tr>
<td>Environment</td>
<td>In March 2015, the City of Paris revealed that 11% of Parisians, or 231,000 people, are potentially exposed to noise pollution exceeding the regulatory threshold of 88 decibels per day. According to the City of Paris' mapping of noise pollution, 112 schools, 11 nurseries and 20 health facilities are affected.</td>
<td>06/10/2015</td>
</tr>
</tbody>
</table>
Overall:

- **Frequency:** As of October 31st, 2017, the City of Paris faces occasional allegations: the City of Paris is involved in 3 stakeholder-related ESG controversies.

- **Severity:** The level of severity is high for the 3 controversies, based on the analysis of their impact on the City of Paris and its stakeholders.

- **Responsiveness:** The City of Paris is reactive: it has implemented remedial actions for 2 cases and is not communicative in 1 case (related to Procurement and Services).

### Part II. ISSUANCE

**Ville de Paris’ investments**

**Purpose of financing (use of proceeds)**

**Green and Social Projects**

**Transparent selection and responsible management of projects**

Eligibility criteria and process for evaluation and selection

**Selected Eligible Projects**

**Transparent allocation**

Rules and process for management of proceeds

**Monitoring & Reporting**

Indicators and commitments

**Allocation**

**Performance and impacts**

**Sustainability Bond Framework**

1. Ensure the use of proceeds will finance Eligible Projects, with the purpose of financing assets related to the Issuer’s environmental and social strategic priorities.

2. Attest the transparent selection and responsible management of these projects, through defined eligibility criteria and formal process for evaluation and selection.

3. Enable documented and transparent allocation process, based on commitments and rules for the management and tracking of proceeds.

4. Report to investors on fund allocation and on the performance and environmental and social benefits of selected projects (output and impact indicators).

**Coherence of the issuance**

The City of Paris’ Sustainable Bond Framework is overall coherent with the organization’s main ESG strategic priorities, and contributes to achieve its associated commitments and objectives. Vigeo Eiris has an overall reasonable level of assurance on the City of Paris’ capacity to integrate relevant issues in terms of environmental and social responsibility.

Regarding climate change, in October 2007 and December 2012, the Council of Paris unanimously approved the Paris Climate and Energy Action Plan, aiming to decrease the overall emissions in Paris by 75% in 2050 (compared to 2004). Intermediate targets have been set:

- Reduce greenhouse gas emissions by 25% by 2020 (compared with 2004).
- Reduce energy consumption by 25% by 2020 (compared with 2004).
- Have 25% renewable and reusable energy at its disposal in its energy consumption in 2020.
- Anticipate and adapt the territory to climate change and dwindling resources.
- The “Swimming in Paris” plan aims to reduce the energy consumption by at least 20% and the water consumption by 10% in swimming pools.

All the Eligible Green Projects (namely clean transportation, energy efficiency, renewable energy and adaptation to climate change) are consistent with this Action Plan and the above-mentioned targets.
The City of Paris has several action plans with which Social Eligible Categories are consistent:

- Social housing is a main concern for the City of Paris and the City aims at building 7,000 social housing units per year between 2015 and 2020.

- Regarding the "Access to essential services" Category, several City initiatives can be mentioned:
  - Paris has a 2020 goal of having 40% of accessible social housing, and 3% of adapted housing.
  - The Parisian scheme toward seniors 2017-2021, contains targets to adapt the social housing park to the oldest inhabitants and to help disadvantaged people to pay for the nursing home.
  - The Parisian Pact against large-scale exclusion aims at helping the most vulnerable populations, notably homeless people.

- The “Quality of life improvement in unprivileged area” Category has a geographical basis: it targets the projects located in “priority areas”, which are defined by law and present the highest economic and social difficulties.

- The City of Paris leads three main actions in favour of “Social Solidarity Economy”, namely supporting cooperatives for activity and employment that assist social entrepreneurs, accompanying entrepreneurs and socially innovative companies and promoting responsible consumption.

Use of proceeds

Vigeo Eiris estimates that the objectives and expected sustainability benefits associated with the Eligible Projects are relevant, measurable, precise and visible for all Eligible Projects. Based on disclosed examples of projects, Vigeo Eiris considers that the Eligible Projects’ contribution to sustainable development is positive, due to the expected environmental and social benefits on climate change mitigation and adaptation, and social and economic inclusion.

The net proceeds of the Sustainability Bond will be used to finance and refinance, in whole or in part, Eligible Projects included in 8 categories, defined by the Issuer as:

- Clean Transportation
- Energy Efficiency
- Renewable Energy
- Adaptation to Climate Change
- Access to essential services for target populations
- Quality of life improvement in unprivileged area
- Social Solidarity Economy
- Social and Affordable Housing.

Eligible Projects will meet a set of eligibility criteria evaluated by Vigeo Eiris.

Eligible Projects are located in Paris region and include recent and future investments or disbursements corresponding to current and/or future projects. Refinancing will be exclusively referring to the budget year of the bond issuance (2017).

The definition of each Eligible Projects’ category, related objectives and expected environmental and social benefits have been evaluated in the tables below.
## Eligible Green Projects:

<table>
<thead>
<tr>
<th>Eligible Projects’ categories</th>
<th>Definitions</th>
<th>Sub-categories</th>
<th>Objectives</th>
<th>Sustainability benefits</th>
<th>Vigeo Eiris’ analysis</th>
</tr>
</thead>
</table>
| **Clean transportation**     | Projects aiming at developing low-carbon energy transport (bicycle, electric vehicles, etc.) and public transport | Public transport: High Quality Transit Line, tramway line extension, refurbishment of public spaces  
Alternative transport: cycling  
Electric vehicles: support to the development of electric cars for residents and professionals, network of charging stations for electric and GNV vehicles | Reduction of GHG emissions, due to low-carbon transport | **Climate change mitigation**  
---  
GHG emissions reduction | The definition is clear and the content is relevant.  
The objectives are visible, precise, measurable and relevant. |
| **Energy efficiency**        | Projects aiming at reducing the energy consumption of buildings and public lighting, while maintaining equivalent level of service (existing situation or vs. standard), with performance goals and energy poverty focus | Buildings: construction of energy efficient, thermal insulation for buildings (schools, social housing, nursing homes, etc.)  
Public lighting and signals: replacement of energy consuming appliances  
Renovation of heating systems | Energy savings | **Climate change mitigation**  
---  
Energy savings | The definition is clear and the content is relevant.  
The objectives are visible, precise, measurable and relevant. |
| **Renewable energy**         | Projects aiming at developing local renewable energy production and/or energy recovery | Renewable energy power plants (solar panels)  
Geothermal energy  
Energy recovery (from wastewater networks, data centers, etc.)  
Heating network | Increase of renewable energy production  
Reduction of GHG emission, due to low-carbon energy use and/or energy recovery | **Climate change mitigation**  
---  
GHG emissions reduction and energy recovery | The definition is clear and the content is relevant.  
The objectives are visible, precise, measurable and relevant. |
| **Adaptation to climate change** | Projects aiming at reducing the impacts of climate change, especially the heat island effect, through the expansion of green area surfaces in Paris | New green areas: areas opened to the public, green roofs, façades and walls  
Tree planting programmes | Increase of green areas and biodiversity in Paris | **Adaptation to climate change**  
---  
GHG emissions segregation | The definition is clear and the content is relevant.  
The objectives are visible, precise, measurable and relevant. |
### Eligible Social Projects:

#### Content of the Sustainability Bond Framework

<table>
<thead>
<tr>
<th>Eligible Projects’ categories</th>
<th>Definitions</th>
<th>Sub-categories</th>
<th>Objectives</th>
<th>Sustainability benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Access to essential services for target populations</strong></td>
<td>Projects aiming at providing access to essential services for vulnerable populations (access to mobility, healthcare, employment, security)</td>
<td>Projects linked to Parisian Pact against large-scale exclusion: homeless reception centres and job-finding resources, centres for dependent elderly people, support for single-parent families, childhood protection and prevention, health protection and prevention</td>
<td>Foster equal access to essential services</td>
<td>The definition of the category is overall clear and the content is relevant. The sub-categories are aligned with the City of Paris’ strategy. The objectives are visible, precise, measurable and relevant.</td>
</tr>
<tr>
<td><strong>Target populations:</strong></td>
<td><em>Homeless people</em> &lt;br&gt; <em>Low-income population</em> (focus on populations living in “Quartiers prioritaires”) &lt;br&gt; <em>Young people</em> &lt;br&gt; <em>Elderly people (over 60 years old)</em> &lt;br&gt; <em>People with disabilities</em> &lt;br&gt; <em>Single-parent families</em></td>
<td>Accessibility to people with reduced mobility: investments linked with the City of Paris 2020 goal of having 40% of accessible social housing, and 3% of adapted housing</td>
<td>Increase the reception capacity  &lt;br&gt; Increase the accessibility capacity</td>
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<tr>
<td><strong>Projects linked to Parisian Senior program:</strong></td>
<td>such as public EHPAD structures development in Paris</td>
<td><strong>Increase the reception capacity</strong>  &lt;br&gt; <strong>Increase the accessibility capacity</strong></td>
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<tr>
<td><strong>Quality of life improvement in unprivileged area</strong></td>
<td>Projects aiming at improving quality of life in “priority areas”, as defined by law and which present the highest economic and social difficulties.</td>
<td><strong>Access to education, culture, leisure and sports:</strong> investment in infrastructures provided there is a “Quartier Prioritaire” in the influence area of the infrastructure</td>
<td>Reduce social exclusion and inequalities</td>
<td>The definition is clear and the content is relevant and aligned with the City of Paris’ strategy. The objectives are visible, precise, measurable and relevant.</td>
</tr>
<tr>
<td><strong>Target populations:</strong></td>
<td><em>Populations living in “Quartiers prioritaires de la Politique de la Ville”</em></td>
<td><strong>Increase education, culture, leisure and sports infrastructure capacity</strong></td>
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<tr>
<td>Social Solidarity Economy</td>
<td>Projects aiming at providing support to employment generation and socio-economic advancement and empowerment</td>
<td>Microfinance and small businesses: projects supporting MSMEs financing, microfinance for social entrepreneurs (“entreprises solidaires”, &quot;structures d’insertion par l’activité économique&quot;) The City of Paris refers to the definition of the “Economie Sociale et Solidaire” (Social Solidarity Economy) as defined per French law “Structures d’insertion par l’Activité Economique” are also regulated by law. Finally, the City of Paris refers to the Exclusion List of the International Finance Corporation, which notably excludes companies involved in the production of weapons, hazardous chemicals, alcoholic beverages or tobacco among others.</td>
<td>The definition is clear, relevant and refers to well-defined national Legislations. In addition, the sectorial exclusion list gives additional assurance on the use of proceeds. The objectives are visible, precise, measurable and relevant.</td>
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<tr>
<td>Target populations:</td>
<td>- Unemployed people</td>
<td>Increase social solidarity economy network</td>
<td>Promote local social solidarity and economic development</td>
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<td></td>
<td>- MSMEs</td>
<td>Generate employment</td>
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<tr>
<td>Social and affordable housing</td>
<td>Projects aiming at increasing the social and affordable housing supply to meet the demand of Parisians</td>
<td>Investments supporting the Parisian ambitious plan of 7,000 additional social housing units per year by 2020 Investments in new housing offer for students</td>
<td>The definition is clear and the content is relevant: - Alignment with the City of Paris’ strategy - Quantitative targets. The objectives are visible and overall precise.</td>
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<tr>
<td>Target populations:</td>
<td>- Low-income populations</td>
<td>Increase social housing capacity</td>
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<td></td>
<td>- Parisian students</td>
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<td>Promote access to housing for all ...</td>
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<td></td>
<td></td>
<td>Reduce precarious situations</td>
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7 The complete list is available at: [http://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/company-resources/ifcexclusionlist#2007](http://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/company-resources/ifcexclusionlist#2007)
In addition, Vigeo Eiris considers that the Eligible Projects align with the 6 following United Nations Sustainable Development Goals (UN SDGs):

**Contribution to achieving the UN SDG 1. No poverty**
The UN SDG 1 consists in ending poverty in all its forms everywhere, with targets by 2030 on ensuring that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property.

By using the Sustainability Bond proceeds to finance Eligible Projects related to the defined “Access to essential services” and “Social and affordable housing” Categories, the City of Paris is contributing to the UN SDG 1, with regards to the above-mentioned targets.

**Contribution to achieving the UN SDG 4. Quality education**
The UN SDG 4 consists in ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all, with targets by 2030 to ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education.

By using the Sustainability Bond proceeds to finance Eligible Projects related to the defined “Quality of life improvement in unprivileged area” Category, the City of Paris is contributing to the UN SDG 4, with regards to the above-mentioned targets.

**Contribution to achieving the UN SDG 7. Affordable and clean energy**
The UN SDG 7 consists in ensuring universal access to affordable, reliable, sustainable and modern energy, with targets by 2030 on the share of renewable energy in the global energy mix and the improvement of energy efficiency.

By using the Sustainability Bond proceeds to finance Eligible Projects related to the defined “Clean transportation”, “Energy efficiency” and “Renewable energy” Categories, the City of Paris is contributing to the UN SDG 7, with regards to the above-mentioned targets.

**Contribution to achieving the UN SDG 8. Decent work and economic growth**
The UN SDG 8 consists in promoting inclusive and sustainable economic growth, employment and decent work for all, with targets by 2030 on the support to productive activities, decent job creation, entrepreneurship, creativity and innovation, and the encouragement of the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services.

By using the Sustainability Bond proceeds to finance Eligible Projects related to the defined “Social Solidarity Economy” Category, the City of Paris is contributing to the UN SDG 8, with regards to the above-mentioned targets.

**Contribution to achieving the UN SDG 11. Sustainable cities and communities**
The UN SDG 11 consists in making cities inclusive, safe, resilient and sustainable, with targets by 2030 on ensuring the access for all to adequate, safe and affordable housing and basic services and upgrade slums, expanding public transport and providing universal access to safe, inclusive and accessible, green and public spaces, in particular for persons with disabilities.

By using the Sustainability Bond proceeds to finance Eligible Projects related to the defined “Clean transportation”, “Adaptation to climate change”, “Access to essential services” and “Social and affordable housing” Categories, the City of Paris is contributing to the UN SDG 11, with regards to the above-mentioned targets.

**Contribution to achieving the UN SDG 13. Climate action**
The UN SDG 13 consists in taking urgent action to combat climate change and its impacts, with one target by 2030 on the integration of climate change measures into policies, strategies and planning.

By using the Sustainability Bond proceeds to finance Eligible Projects related to the defined “Clean transportation”, “Energy efficiency”, “Renewable energy” and “Adaptation to climate change” Categories, the City of Paris is contributing to the UN SDG 13, with regards to the above-mentioned target.

**Process for project evaluation and selection**
Vigeo Eiris considers that the evaluation and selection process of the Eligible Projects is clearly defined. The Sustainability Bond evaluation and selection process is considered to be good in terms of transparency and governance and relevant in terms of eligibility criteria, thus in line with the Green and Social Bond Principles.
The Issuer is committed to attest the transparency and efficiency of the selection process as well as the responsible management of the proceeds and financed projects, through defined eligibility criteria as defined within the existing Sustainability Bond Framework, which has been evaluated by Vigeo Eiris using our evaluation methodology based on international and sectors standards, in line with the Green and Social Bond Principles guidelines.

The process for evaluation and selection of Eligible Projects to be financed or refinanced is clearly and publicly defined and formalized in the Sustainability Bond Framework.

The Issuer has defined and commits to structure the selection process, and to define internal roles and responsibilities with:

- A first analysis of projects eligibility is carried on by the City of Paris’ Finance and Procurement department (“Direction des Finance et des Achats”, DFA), which collects data regarding Eligible Projects. Elected Members of the Paris Municipal Council are involved in discussions at this stage, as well as operational teams managing the projects.

- A dedicated Sustainability Bond Committee will be created comprising the General Secretary (“Secrétariat Général”), Finance and Procurement department, the Urban Ecology Agency (“Agence d’Ecologie Urbaine”, AEU) and the relevant teams in charge of social programs. The Committee will select the projects, review and approve the allocation of the proceeds to eligible projects and the annual reporting on an annual basis and when circumstances so require.

The evaluation and selection process is based on relevant internal expertise, all along the investment process:

- Employees with financial and environmental backgrounds are currently involved in the evaluation and selection process.

- The Committee gathers employees demonstrating appropriate environmental expertise and the City of Paris plans on involving people with a social background. At this point, we do not have enough information on these persons’ qualifications to give an opinion on their level of expertise.

The verification and traceability is ensured through the following processes:

- The list of Eligible Projects has been established and will be made available when announcing the issuance.

- A scorecard based on the City of Paris’ project database (2,800 lines) may be created to reinforce the traceability of the selection process.

The process relies on overall relevant eligibility criteria:

- All the projects selected for this issuance are part of the City of Paris’ investment plan 2014-2020 (“Plan d’investissement de la mandature”) which has been voted by the Municipal Council.

- Use of proceeds criteria are based on the definition of each Eligible Projects’ category and defined in line with the City of Paris’ strategic priorities.

- ESG criteria: the large majority of projects is covered by markets supervised by the Procurement Department (“Sous-Direction des Achats – SDA”) in the frame of a Responsible Procurement Charter which guarantees the automatic inclusion of some ESG criteria and/or clauses in the selection of contractors and suppliers. In particular, a specific team (the “Bureau support et techniques d’achats”) is in charge of responsible purchasing. Some projects, such as heating systems, have a dedicated procurement department which ensures the integration of ESG criteria in contracts, supported by the “Bureau support et techniques d’achats” in some cases.

**Management of proceeds**

*Vigeo Eiris considers that the Issuer’s rules for management of proceeds are clearly defined and would enable a documented transparent allocation process. The management of proceeds commitments are considered to be good, in line with the Green and Social Bond Principles.*

The net proceeds of the Sustainability Bond issuance will be managed within the City of Paris’ treasury liquidity portfolio, in cash or other liquidity instruments, until the total amount of the net proceeds equals the total amount of selected Eligible Projects and/or until the maturity date of the bond.

The City of Paris will take specific measures as part of the annual financial audit process to track the invested amounts used to finance the selected Eligible Projects.

The net proceeds of the issuance will be only used to finance current and future projects.

In case of project divestment, the Issuer will use the net proceeds to finance other Eligible Projects which are compliant with the current Use of Proceeds.

All the management of proceeds will be reviewed annually by the Public Accountant and the Président, representing the French State.
Monitoring & Reporting

The process for data collection, consolidation and reporting has been defined in the Sustainability Bond Framework, including relevant people from across the City, including at project level.

The reporting commitments of the Issuer are aligned with the Green and Social Bond Principles, covering fund allocation and environmental and social benefits of all financed Projects and Categories. Regarding monitoring and reporting on ESG management, the Issuer will report at project and bond level.

Vigeo Eiris considers that the City of Paris’ overall reporting commitments are good, leading to a reasonable level of assurance on the City of Paris’ capacity to regularly report on the Sustainability Bond use of proceeds and environmental and social benefits.

The process for data collection, consolidation and reporting has been clearly defined, including relevant people from across the Group, including at project level:

- Asset or project managers are in charge of collecting the identified information.
- A first consolidation will be made at category and Direction/Department levels.
- Then the Agence d’Ecologie Urbaine will aggregate the environmental indicators.
- The Direction des Finances et des Achats will centralize the data regarding the use of proceeds reporting.
- The dedicated Sustainability Bond Committee will review and approve the reporting on an annual basis.

The Issuer is committed to make its reporting available on its website, according to the Green and Social Bond Principles, including on calculation methodology.

The Issuer commits to transparently report on the Sustainability Bond, until the complete allocation of proceeds, on:

- Use of proceeds: list of financed projects, with related summary description of each project.

<table>
<thead>
<tr>
<th>Reporting indicators at portfolio level</th>
<th>Reporting indicators at Category level</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of projects financed by the proceeds, including their description (date, location, category, progress)</td>
<td>- List of projects financed by the proceeds, including their description (date, location, category, progress)</td>
</tr>
<tr>
<td>Amounts invested (in EUR)</td>
<td>- Amounts invested (in EUR)</td>
</tr>
<tr>
<td>Allocated amount vs. total amount (in %)</td>
<td>- Allocated amount vs. total amount (in %)</td>
</tr>
</tbody>
</table>

- Environmental and social benefits: annual estimates given at project level and, when feasible, aggregated at category level for all projects categories.

<table>
<thead>
<tr>
<th>Eligible Categories</th>
<th>Outputs reporting indicators</th>
<th>Impacts reporting indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean transportation</td>
<td>- Passenger kilometers</td>
<td>- Ex-ante estimation of annual GHG emissions reduced (tCO2e)</td>
</tr>
<tr>
<td></td>
<td>- Distance of created cycle paths (km)</td>
<td>- Ex-ante estimation of annual energy savings (MWh)</td>
</tr>
<tr>
<td></td>
<td>- Number of created electrical terminals</td>
<td>- Ex-ante estimation of annual Greenhouse Gas (GHG) emissions reduced or avoided (tCO2e)</td>
</tr>
<tr>
<td>Energy efficiency</td>
<td>- Number of renovated housing</td>
<td>- Ex-ante estimation of annual energy savings (MWh)</td>
</tr>
<tr>
<td>Renewable energy</td>
<td>- Ex-ante estimation of annual renewable energy produced (MWh)</td>
<td>- Ex-ante estimation of annual renewable energy recovered</td>
</tr>
<tr>
<td></td>
<td>- Ex-ante estimation of capacity of renewable energy plant(s) constructed</td>
<td>- Ex-ante estimation of annual renewable energy recovered</td>
</tr>
<tr>
<td>Adaptation to climate change</td>
<td>- Ex-ante estimation of annual renewable energy recovered</td>
<td>- Ex-ante estimation of annual renewable energy recovered</td>
</tr>
<tr>
<td></td>
<td>- Delivered energy from heating network</td>
<td>- Ex-ante estimation of annual GHG emissions avoided (tCO2e)</td>
</tr>
<tr>
<td></td>
<td>Total New surface of green areas opened to the public (m²)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total surface of new green areas on buildings : green roofs, facades and green walls, etc. (m²)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total number of planted trees within Paris intra muros area</td>
<td></td>
</tr>
<tr>
<td>Access to essential services</td>
<td>- Nb of beneficiaries</td>
<td></td>
</tr>
<tr>
<td>Quality of life improvement in unprivileged area</td>
<td>- Nb of programs/projects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Nb of beneficiaries</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Nb of projects</td>
<td></td>
</tr>
</tbody>
</table>
Beyond the Green and Social Bond Principles, in line with international standards, certain ESG factors have been integrated in the monitoring and reporting process, covering main ESG risks related to the Eligible Projects.

<table>
<thead>
<tr>
<th>Domain</th>
<th>Criteria</th>
<th>Performance Indicators, at project level</th>
<th>Performance indicators, at bond level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Solidarity Economy</td>
<td>- Nb of MSMEs supported</td>
<td>- Nb of jobs preserved</td>
<td>- Nb of jobs created</td>
</tr>
<tr>
<td>Social and affordable housing</td>
<td>- Nb of dwellings</td>
<td>- Nb of beneficiaries</td>
<td>- Nb of students</td>
</tr>
</tbody>
</table>

The City of Paris may select alternative quantitative or qualitative indicators to remain relevant to the selected Green and Social projects and may integrate additional indicators to disclose relevant performances or details on projects management.

Reporting on any bonds issued under the City of Paris’ Sustainability Bond Framework will be made available on an annual basis and until full allocation on the City of Paris’ website, including calculation methodologies.

*Data collected at Paris’ Purchasing Division level*
METHODOLOGY

In Vigeo Eiris’ view, Environmental, Social and Governance (ESG) factors are intertwined and complementary. As such they cannot be separated in the assessment of ESG management in any organization, activity or transaction. In this sense, Vigeo Eiris writes an opinion on the Issuer’s Corporate Social Responsibility as an organization, and on the objectives, management and reporting of the projects to be (re)financed by this transaction.

Vigeo Eiris’ methodology to define and to assess corporate’s ESG performance is based on criteria aligned with public international standards, in compliance with the ISO 26000 guidelines, and organized in 6 domains: Environment, Human Resources, Human Rights, Community Development, Procurement and Services, and Governance. The evaluation framework has been customized regarding material issues, based on the relevant assessment frameworks, projects specificities and emerging issues.

Vigeo Eiris reviewed information provided by the Issuer, press content providers and stakeholders (partnership with Factiva Dow Jones: access to the content of 28,500 publications worldwide from reference financial newspapers to sector-focused magazines, local publications or Non-Government Organizations). Information gathered from these sources will be considered as long as they are public, documented and traceable. Vigeo Eiris has reviewed documents and websites of the Issuer (“fiches projet”, Plan Climate Energie 2012, Sustainable Development Report 2016, Bleu Climat Energie 2016, Schéma Parisien de la Commande Responsable, Charte Déontologie des Achats, Fiche Stratégie Achats, Bleu logement 2016, Circulaire de programmation du logement social et intermédiaire à Paris for year 2017, Schéma parisien pour les seniors 2017-2021, Pacte Parisien de lutte contre la grande exclusion), related to the Bond evaluation and interviewed members from several departments of the Issuer.

Our research and rating procedures are subject to internal quality control at three levels (analysts, heads of cluster sectors, and internal review by the audit department for second party opinions) complemented by a final review and validation by the Direction of Methods. A right of complaint and recourse is guaranteed to all companies under our review, including three levels: first, the team linked to the City of Paris, then the Direction of Methods, and finally Vigeo Eiris’ Scientific Council. All collaborators are signatories of Vigeo Eiris’ Code of Ethics.

**Part 1. ISSUER**

**NB: the Issuer performance, i.e., commitments, processes, results of the Issuer, related to ESG issues have been assessed through a complete process of rating and benchmark developed by Vigeo Eiris Rating.**

**Level of the Issuer’s ESG performance**

The City of Paris has been evaluated by Vigeo Eiris on its Corporate Social Responsibility (CSR) performance, based on 24 relevant ESG drivers organized in the 6 sustainability domains. The City of Paris’ performance has been assessed by Vigeo Eiris on the basis of its:

- **Leadership:** relevance of the commitments (content, visibility and ownership).
- **Implementation:** coherence of the implementation (process, means, control/reporting).
- **Results:** indicators, stakeholders’ feedbacks and controversies.


**Stakeholder-related ESG controversies and involvement in controversial activities**

A controversy is a piece of information, a flow of information, or a contradictory opinion that is public, documented and traceable, allegation against an Issuer on corporate responsibility issues. Such allegations can relate to tangible facts, be an interpretation of these facts, or constitute an allegation on unproven facts.

Vigeo Eiris provides an opinion on companies’ controversies risks mitigation based on the analysis of 3 factors:

- **Severity:** the more a controversy will relate to stakeholders’ fundamental interests, will prove actual corporate responsibility in its occurrence, and will have adverse impacts for stakeholders and the City of Paris, the highest its severity. Severity assigned at corporate level will reflect the highest severity of all cases faced by the City of Paris (scale: Minor, Significant, High, Critical).
- **Responsiveness:** ability demonstrated by an Issuer to dialogue with its stakeholders in a risk management perspective and based on explanatory, preventative, remediating or corrective measures. At corporate level, this factor will reflect the overall responsiveness of the City of Paris for all cases faced (scale: Proactive, RemEDIATE, Reactive, Non Communicative).
- **Frequency:** reflects for each ESG challenge the number of controversies faced. At corporate level, this factor reflects on the overall number of controversies faced and scope of ESG issues impacted (scale: Isolated, Occasional, Frequent, Persistent).

The impact of a controversy on the City of Paris’ reputation reduces with time, depending on the severity of the event and the City of Paris’s responsiveness to this event. Conventionally, Vigeo Eiris’ controversy database covers any controversy with Minor or Significant severity during 24 months after the last event registered and during 48 months for High and Critical controversies.
**Part II: ISSUANCE**

The Sustainability Bond Framework has been evaluated by Vigeo Eiris according to the Green and Social Bond Principles and our methodology based on international standards and sector guidelines applying in terms of ESG management and assessment.

**Use of proceeds**

The use of proceeds requirements are defined to ensure that the funds raised are used to finance and/or refinance an Eligible Projects and are traceable within the issuing organisation. Each Project endorsed shall comply with at least one of the Eligible Projects category definition in order to be considered as an Eligible Project. Vigeo Eiris evaluates the relevance, visibility, and measurability of the associated environmental and/or social objectives. The sustainability purpose of the Sustainability Bond related Eligible Projects has been precisely defined, with regard to the Issuer’s commitments, and assessed based on the described and estimated benefits of Eligible Projects. The contribution of Eligible Projects to sustainable development is evaluated based on the United Nations Sustainable Development Goals.

**Process for project evaluation and selection**

The evaluation and selection process has been assessed by Vigeo Eiris regarding its transparency, governance and efficiency. The relevance and exhaustiveness of selection criteria and associated supporting elements integrated in the Sustainability Bond Framework, and the coherence of the process are analysed based on material issues considered in Vigeo Eiris’ methodology.

**Management of proceeds**

The rules for the management of proceeds and the allocation process have been evaluated by Vigeo Eiris regarding their transparency, coherence and efficiency.

**Reporting**

Reporting indicators, processes and methodologies are defined by the Issuer to enable annual reporting on fund allocation, environmental benefits (output and impact indicators) and on the responsible management of the Eligible Projects financed by the Sustainability Bond proceeds, collected at project level and potentially aggregated at bond level. Vigeo Eiris has evaluated the relevance of the reporting framework according to three principles: transparency, exhaustiveness and effectiveness.

- Scale of assessment for processes and commitments: Weak, Limited, Good, Advanced.
- Scale of level of assurance on Issuer’s capacity: Reasonable, Moderate, Weak.

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**VIGEO EIRIS’ ASSESSMENT SCALES**

<table>
<thead>
<tr>
<th>Performance evaluation</th>
<th>Level of assurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced</td>
<td>Advanced commitment; strong evidence of command over the issues dedicated to achieving the objective of social responsibility. Reasonable level of risk management and using innovative methods to anticipate emerging risks.</td>
</tr>
<tr>
<td>Good</td>
<td>Reasonable level of risk management.</td>
</tr>
<tr>
<td>Limited</td>
<td>Commitment to the objective of social responsibility has been initiated or partially achieved; fragmentary evidence of command over the issues. Limited to weak level of risk management.</td>
</tr>
<tr>
<td>Weak</td>
<td>Commitment to social responsibility is non-tangible; no evidence of command over the issues. Level of insurance of risk management is weak to very weak.</td>
</tr>
<tr>
<td></td>
<td>Able to convincingly conform to the prescribed principles and objectives of the evaluation framework</td>
</tr>
<tr>
<td></td>
<td>Compatibility or partial convergence with the prescribed principles and objectives of the evaluation framework</td>
</tr>
<tr>
<td></td>
<td>Lack or unawareness of, or incompatibility with the prescribed principles and objectives of the evaluation framework</td>
</tr>
</tbody>
</table>
Vigeo Eiris is a global provider of environmental, social and governance (ESG) research to investors and public and private corporates. The agency evaluates the level of integration of sustainability factors into organisations’ strategy and operations, and undertakes a risk assessment to assist investors and companies’ decision-making.

Vigeo Eiris offers two types of services through separate business units:

- **Vigeo Eiris rating** offers databases, sector-based analyses, ratings, benchmarks and portfolio screening, to serve all ethical and responsible investment strategies.

- **Vigeo Eiris enterprise** works with organisations of all sizes, from all sectors, public and private in order to support them in the integration of ESG criteria into their business functions and strategic operations.

Vigeo Eiris methodologies and rating services adhere to the strictest quality standards and have been certified to the independent ARISTA® standard. Vigeo Eiris is an approved verifier for CBI (Climate Bond Initiative). Vigeo Eiris’ research is referenced in several international scientific publications.

Vigeo Eiris is present in Paris, London, Boston, Brussels, Casablanca, Milan, Montreal, Santiago, Stockholm and Tokyo and has a team of 200. The agency works with partners through its Vigeo Eiris Global Network.

For more information: [www.vigeo-eiris.com](http://www.vigeo-eiris.com)