

# Second-Party Opinion

## Smart Luz Sustainability Bond Framework



### Evaluation Summary

Sustainalytics is of the opinion that the Smart Luz Sustainability Bond Framework is credible and impactful and aligns with the Sustainability Bond Guidelines 2021, Green Bond Principles 2021, and Social Bond Principles 2021. This assessment is based on the following:



**USE OF PROCEEDS** The activities defined under the use of proceeds – Modernization and Improvement of Rio de Janeiro’s Public Lighting System and Related Services – are aligned with categories recognized by both the Green Bond Principles and/or Social Bond Principles, namely Energy Efficiency, Climate Change Adaptation, Affordable Basic Infrastructure, and Access to Essential Services. Sustainalytics considers that activities in the eligible category will lead to positive environmental or social impacts and advance the UN Sustainable Development Goals (“SDGs”), specifically SDGs 7, 9, and 11.



**PROJECT EVALUATION / SELECTION** Smart Luz’s Lenders’ Independent Engineer and Bond guarantor were responsible for the due diligence and review of the construction costs and capital expenditure schedule associated with the pre-identified Eligible Activities to be financed per the criteria defined under the Framework. Sustainalytics considers the project selection process in line with market practice.



**MANAGEMENT OF PROCEEDS** Smart Luz’s management team will be responsible for the allocation of bond proceeds. In addition, Smart Luz’s Controller will be responsible for overseeing internal controls including the execution of payments and managing fiscal compliance and accounting records. Smart Luz will hold the unallocated proceeds in an escrow account until full allocation. This is in line with market practice.



**REPORTING** Smart Luz intends to publish Sustainability Report(s) on its website to report on the allocation and the impact of proceeds on an annual basis until full allocation. The allocation reporting is expected to include externally verified project-level details on the allocation of net proceeds, the balance of unallocated proceeds, along with semi-annual progress on the achievement of Eligible Activities, including comparison of actual physical-financial performance compared to contractual milestones. In addition, Smart Luz intends to report on relevant quantitative impact where feasible and has provided indicative metrics within the Framework. Sustainalytics views Smart Luz’s allocation and impact reporting as aligned with market practice.

<b>Evaluation date</b>	July 2, 2021
<b>Issuer Location</b>	Rio de Janeiro, Brazil

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## Introduction

Smart Luz Concessionária de Iluminação Pública SPE S.A. (“Smart Luz”, or the “Issuer”) was granted a sub-concession by Rio Luz,<sup>1</sup> the municipal company that manages the public lighting system (“PLS”) of the city of Rio de Janeiro (or the “City”), after a competitive bidding process. The sub-concession entails a 20-year Public-Private Partnership concession structured by the International Finance Corporation for the provision of certain public lighting and smart city technologies and solutions.

Smart Luz has developed the Smart Luz Sustainability Bond Framework (the “Framework”) under which it intends to issue sustainability bonds and use the proceeds to finance activities that are expected to create positive environmental and social impacts for the City. The Framework defines eligibility criteria in one area:

### 1. Modernization and Improvement of Rio de Janeiro’s Public Lighting System and Related Services

Smart Luz engaged Sustainalytics to review the Smart Luz Sustainability Bond Framework, dated May 2021, and to provide a Second-Party Opinion on the Framework’s environmental and social credentials and its alignment with the Sustainability Bond Guidelines 2021 (SBG), Green Bond Principles 2021 (GBP), and Social Bond Principles 2021 (SBP).<sup>2</sup> This Framework has been published in a separate document.<sup>3</sup>

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

Sustainalytics’ Second-Party Opinion reflects Sustainalytics’ independent<sup>4</sup> opinion on the alignment of the reviewed Framework with the current market standards and the extent to which the eligible project categories are credible and impactful.

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

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

For the use of proceeds assessment, Sustainalytics relied on its internal taxonomy, version 1.8, which is informed by market practice and Sustainalytics’ expertise as an ESG research provider.

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

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

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

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

<sup>1</sup> RioLuz website, “Municipal Energy and Lighting Company – RioLuz”, at: <http://www.rio.rj.gov.br/web/rioluz>

<sup>2</sup> The Sustainability Bond Guidelines are administered by the International Capital Market Association and are available at <https://www.icmagroup.org/green-social-and-sustainability-bonds/sustainability-bond-guidelines-sbg/>

<sup>3</sup> The Smart Luz Sustainability Bond Framework is available on Smart Luz Concessionária de Iluminação Pública SPE S.A.’s website at: [www.smartluz.rio](http://www.smartluz.rio)

<sup>4</sup> When operating multiple lines of business that serve a variety of client types, objective research is a cornerstone of Sustainalytics and ensuring analyst independence is paramount to producing objective, actionable research. Sustainalytics has therefore put in place a robust conflict management framework that specifically addresses the need for analyst independence, consistency of process, structural separation of commercial and research (and engagement) teams, data protection and systems separation. Last but not the least, analyst compensation is not directly tied to specific commercial outcomes. One of Sustainalytics’ hallmarks is integrity, another is transparency.

measurement and reporting of the impact achieved through projects financed under the Framework is the responsibility of the Framework owner.

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

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

## Sustainalytics' Opinion

### Section 1: Sustainalytics' Opinion on the Smart Luz Sustainability Bond Framework

Sustainalytics is of the opinion that the Smart Luz Sustainability Bond Framework is credible, impactful and aligns with the four core components of the GBP, and SBP. Sustainalytics highlights the following elements of Smart Luz's Sustainability Bond Framework:

- Use of Proceeds:
  - The activities defined under the eligible category ("Eligible Activities") – Modernization and Improvement of Rio de Janeiro's Public Lighting System and Related Services (the "Project") – are aligned with those recognized by the GBP and/or SBP. Sustainalytics considers the Eligible Activities to be aligned with the GBP/SBP categories of Energy Efficiency, Climate Change Adaptation, Affordable Basic Infrastructure, and Access to Essential Services.
  - In terms of environmental Eligible Activities, Smart Luz intends to invest in: (i) the replacement of public lighting with energy-efficient lightings with LED lamps, (ii) remote management systems to control public lightings, (iii) traffic and environmental real-time monitoring cameras, (iv) smart traffic controllers, and (v) intelligent storm drains. Sustainalytics recognizes the potential of energy-efficient equipment and technologies in creating positive environmental impacts and considers the criteria to be aligned with market practice, additionally noting the following:
    - In addition to energy efficiency benefits compared to conventional lighting technologies, the use of LEDs and smart lighting sensors can reduce unnecessary ambient lighting ("light pollution") which can negatively impact wildlife.
    - Traffic and environmental monitoring technologies, including cameras, may drive a number of environmental benefits including reduced vehicle emissions, greater performance of public transit systems, and more efficient operation of municipal infrastructure.
    - Sensor-enabled stormwater infrastructure can support broader efforts to adapt to the effects of climate change such as flooding and heavy precipitation events.
  - In terms of social Eligible Activities, Smart Luz intends to invest in: (i) free-of-cost Wi-Fi access points at public places, and (ii) installation of CCTV cameras in public places such as plazas and parks. The aim is to provide services to all people living in the City, and specifically those which lack access to basic technological infrastructure, including the internet.<sup>5</sup> Sustainalytics considers the criteria to be aligned with market practice and notes the following:
    - For investments in CCTV cameras, Sustainalytics recognizes the potential positive social impacts, specifically improved public safety<sup>6</sup> (Refer to Section 2 for more details). Nevertheless, Sustainalytics notes that the use of CCTV technology can, in certain applications, raise concerns related to equity and privacy. The Issuer recognizes the importance of data privacy and has shared a Data Privacy Agreement

<sup>5</sup> Widespread access to the internet is an ongoing challenge in Brazil. See: Rio Times, "In 2019, Brazil had nearly 40 million people with no internet access, says IBGE", at: <https://riotimesonline.com/brazil-news/brazil/in-2019-brazil-had-nearly-40-million-people-with-no-internet-access-says-ibge/>

<sup>6</sup> Rio de Janeiro is recognized as having a high crime rate. See: OSAC, "Brazil 2020 Crime & Safety Report: Rio de Janeiro", at: <https://www.osac.gov/Country/Brazil/Content/Detail/Report/9085b10f-2a36-4ca9-b299-18aced68cdd3>

- with Sustainalytics, describing how the Company will protect data and under what conditions it may be shared, for example with law enforcement (more details in Section 2). Specifically, the CCTV system is intended to support in criminal investigations rather than proactive monitoring and will not make use of facial recognition technology. Overall, considering the public safety objectives in the local context and the policies in place around the use of the system, Sustainalytics anticipates the investments to deliver net-positive social outcomes. Nonetheless, Sustainalytics encourages the Issuer to undertake ongoing monitoring to ensure compliance with privacy policies and data-sharing procedures, and to report periodically on the positive impacts achieved.
- Some Eligible Activities are intended to provide both environmental and social benefits. The Issuer intends to finance (i) the expansion of PLS through installation of new energy efficient lightings, (ii) a city-wide Internet of Things (“IoT”) network to connect assets that offer environmental and/or social benefits (collectively, “Connected Assets”), and (iii) capital expenditures related to the installation of a centralized command center to control Connected Assets. Sustainalytics has confirmed that the types Connected Assets across Eligible Activities will be limited to the ones defined under the Framework and notes the following:
    - For the expansion of PLS, Sustainalytics notes that the Issuer intends to install LED lamps in those regions of the City that do not have access to public lightings. Sustainalytics recognizes the potential of energy-efficient public lighting in creating positive environmental impact including low energy consumption compared to regular lightings, and positive social impact including possible reduction in night-time road accidents and views the criteria to be aligned with market practice.
    - Sustainalytics recognizes the potential environmental and social outcomes created by IoT-enabled public infrastructure; while IoT networks may connect a variety of devices, which do not all provide sustainability benefits, the initial target of Smart Luz’s network will be smart utilities metering, environmental monitoring, and waste management, which are viewed as providing positive environmental impacts, Sustainalytics therefore considers the investment criteria to be aligned with market practice.
    - For investments in command centers, Sustainalytics recognizes that centralized data processing and control system will support the Connected Assets, and views investments in such facilities as integral to achieving the anticipated benefits and, therefore, considers these investments to be in line with market practice.
  - Project Evaluation and Selection:
    - Smart Luz’s Lenders’ Independent Engineer and Bond guarantor were responsible for the due diligence and review of the construction costs and capital expenditure schedule associated with the pre-identified Eligible Activities to be financed per the criteria defined under the Framework.
    - Based on the above, Sustainalytics considers this process to be in line with market practice.
  - Management of Proceeds:
    - Smart Luz’s management team will be responsible for the allocation of bond proceeds that will be released from dedicated escrow account(s) by the Debentures Trustee following an external verification of the use of bond proceeds per the criteria defined under the Framework.
    - In addition, the Issuer’s Controller will be responsible for overseeing internal controls including the execution of payments and managing fiscal compliance and accounting records.
    - Smart Luz intends to disburse the majority of the proceeds over the first two years of the contract, as it converts the existing street lighting to LEDs. The remainder may be deployed over the life of the concession for system expansion, other Eligible Activities, and ongoing maintenance. The Issuer has communicated that it intends to temporarily hold the unallocated proceeds in escrow accounts or invest in cash or cash equivalents.
    - Based on the management of the bond proceeds and the disclosure on the temporary use of unallocated proceeds, Sustainalytics considers this process to be in line with market practice.
  - Reporting:
    - Smart Luz intends to publish Sustainability Report(s) on its website to report on the allocation and the impact of proceeds on an annual basis until full allocation.
    - The allocation reporting is expected to include externally verified project-level details on the allocation of net proceeds, the balance of unallocated proceeds, along with semi-annual

progress on the achievement of Eligible Activities, including comparison of actual physical-financial performance compared to contractual milestones.

- The impact reporting is expected to provide project-wide impact of the projects against respective key performance indicators including (i) atmospheric emissions, (ii) energy efficiency, (iii) water consumption, (iv) emergency response incidents, (v) wage levels, and (vi) accidents including injuries, health problems, material damage, and near misses. In addition, Smart Luz intends to publish Carbon Finance reporting which is expected to include the annual emission reduction performance of Eligible Activities, as monitored, and assessed by third-party platforms.
- Based on the Issuer's commitment to allocation reporting and impact reporting, Sustainalytics considers this process to be in line with market practice.

### **Alignment with Sustainability Bond Guidelines 2021**

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

## **Section 2: Sustainability Strategy of Smart Luz**

### **Contribution of Framework to Smart Luz Concessionária de Iluminação Pública SPE S.A.'s sustainability mandate**

Sustainalytics is of the opinion that Smart Luz demonstrates a commitment to sustainability with a focus on three key environmental and social areas: (i) energy efficiency, (ii) reduction of light pollution, and (iii) increased public safety and crime reduction.

As a consortium of organizations, Smart Luz was formed to deliver the projects outlined in the Framework. Smart Luz is executing the projects mentioned in the Framework under concession from the City and will contribute to the City's goal of becoming carbon neutral by 2050 through reductions in energy intensity.<sup>7</sup> Expected outcomes of the project include both environmental and social benefits as a result of the installation and replacement of lightings and its supporting infrastructure, including smart city technology. Smart Luz envisages the Project to provide the following benefits:

- Environmental – Smart Luz expects the upgrading of the City's PLS to contribute to a 60% reduction in electricity consumption by the system as a result of the installation of 450,000 LED luminaries and the installation of 100,000 additional lighting points across Rio de Janeiro. Additionally, Smart Luz predicts that the installation of smart city infrastructure including dimming controlled by a remote management system will provide a reduction in light pollution in the City.
- Social – Smart Luz estimates the Project to provide a 10-15% reduction in crime and a 30% reduction in injuries related to road accidents in the nighttime, as a result of an improved lighting system and supporting smart city technologies. In addition to the PLS, Smart Luz will provide the City with 4,000 flood sensors, install free public Wi-Fi points with an intent to provide free internet access to around 1 million people across the City, and install smart traffic controllers for reduce congestion and pollution.

Sustainalytics is of the opinion that the Smart Luz Sustainability Bond Framework is aligned with the Issuer's overall sustainability strategy and initiatives and will further the Issuer's action on its key environmental and social priorities.

### **Well-positioned to address common environmental and social risks associated with the projects**

While Sustainalytics recognizes that the use of proceeds from the Framework will be directed towards Eligible Activities that are expected to have positive environmental and social impact, Sustainalytics is aware that such Eligible Activities could also lead to negative environmental and social outcomes. Some key environmental and social risks associated with the Eligible Activities, could include occupational health and safety, community relations/stakeholder participation, and data privacy.

Sustainalytics is of the opinion that Smart Luz is able to manage and/or mitigate potential risks through the implementation of its Environmental and Social Management System ("ESMS"). The ESMS is intended to

<sup>7</sup> C40, "Cities100: Rio de Janeiro has aligned sustainable development and climate action", (2021), at: [https://www.c40knowledgehub.org/s/article/Cities100-Rio-de-Janeiro-has-aligned-sustainable-development-and-climate-action?language=en\\_US](https://www.c40knowledgehub.org/s/article/Cities100-Rio-de-Janeiro-has-aligned-sustainable-development-and-climate-action?language=en_US)

assess and control risks associated with the Project and company activities throughout the planning, implementation, assessment and improvement phases. The ESMS includes the following elements:

- Policy – Smart Luz’s ESMS policy intends to promote compliance with regional legislation and address the identified environmental and social risks associated with Eligible Activities.
- Risk Identification – Smart Luz has adopted ISO 31000 standard to evaluate risks associated with Eligible Activities under the Framework. The Issuer has identified operational risks, ESG, economic, legal, technological, labour and tax risks as potential risks to be captured under the ESMS.
- Stakeholder engagement and External Communications – under the ESMS, Smart Luz has detailed its stakeholder engagement procedure and how it intends to communicate with stakeholders. This includes the use of a grievance mechanism for individuals.
- Reporting, Monitoring and Management – Smart Luz has implemented multiple management programs including occupational health and safety, community action plans, plans for the disposal of materials and waste from construction and the prevention of environmental risks program.
- Data Privacy – Smart Luz has confirmed with Sustainalytics that it has completed a Data Privacy Agreement<sup>8</sup> between Rio Luz, Smart Rio, the Municipality of Rio De Janeiro and the Municipal Guard of Rio De Janeiro. The agreement includes safeguards for the protection of personal data and the associated risk mitigation procedures, including required processes around data anonymization, protections against the use of data in manners which may be discriminatory, procedures in cases of personal data breaches, and clauses that prohibit the transfer or sharing of data with third parties.
  - Under the terms of the Agreement periodic assessments must be conducted to ensure ongoing compliance.
  - Sustainalytics notes that this agreement alone does not fully mitigate risks which may be associated with the generation of potentially sensitive personal data from CCTV surveillance, however, by entering into a legally binding agreement to which government and law enforcement are parties the Issuer has taken a reasonable and robust approach to managing these risks.

Based on these policies, standards and assessments, Sustainalytics is of the opinion that Smart Luz has implemented adequate measures and is well-positioned to manage and mitigate environmental and social risks commonly associated with the eligible categories.

### Section 3: Impact of Use of Proceeds

The Eligible Activities are aligned with categories recognized by GBP and/or SBP. Sustainalytics has focused below where the impact is specifically relevant in the local context.

#### Importance of modernization and improvement of Rio de Janeiro’s public lighting system

According to a 2017 World Bank Report, upgrading and expanding public lighting in Brazilian cities is a priority in order to prosper economically, socially, and environmentally.<sup>9</sup> The World Bank reported that the biggest challenge Brazilian cities face to upgrade and develop public lighting infrastructure is the high cost of the investment required, despite the decrease in costs associated with LED lighting.<sup>10</sup> A study from Northern Brazil found that upgrading street lighting decreased the number of homicides in different municipalities.<sup>11</sup> The study estimates that in Brazil full public street lighting coverage in a municipality not previously covered would prevent 48.1 violent deaths per 100,000 inhabitants. In the northeast region of the country, when previously unserved municipalities are totally covered, an estimated reduction of 13.4 violent deaths per 100,000

<sup>8</sup> This agreement has been provided to Sustainalytics for review.

<sup>9</sup> World Bank, “Lighting Brazilian Cities: Business Models For Energy Efficient Public Street Lighting”, (2017), at:

<https://documents1.worldbank.org/curated/en/679281521548635917/pdf/ESM-P150942-PUBLIC-LightingBrazilianCitiesReportENGLISHFINAL.pdf>

<sup>10</sup> Ibid

<sup>11</sup> Arvate, Paulo., Falsete, Filipe., Ribeiro, Filipe., Souza, Andre. (2018). “Lighting and Homicides: Evaluating the Effect of an Electrification Policy in Rural Brazil on Violent Crime Reduction. Springer”, at: <https://link.springer.com/article/10.1007%2Fs10940-017-9365-6>

inhabitants was achieved. Between 2017 and 2018, the City’s murder rate fell by 13% from 59,000 to 51,000.<sup>12</sup> Despite declining murder rates, the City still experiences high levels of crime.<sup>13</sup>

Reducing crime through the upgrading and development of public lighting in the City has the potential to significantly improve social and economic livelihoods, however it is only one of many investments and policies that can contribute to the reduction of crime. The availability of a PLS near homes is important to the quality of life of residents and the City in general including reduction in light pollution, and safety-related incidents. As per a U.S. Department of Energy report, for an observer located 40 kilometers away from a city center, LED and beam-forming optic technologies reduce the contribution of streetlights to skyglow by 95%.<sup>14</sup> Improved night lighting also benefits people for activities such as tourism and entertainment since it effectively extends working hours.<sup>15</sup>

In addition to public safety benefits, improving Rio’s inefficient lighting system will also provide costs savings to the City. Across Brazil, public lighting accounts for about 4% of the country’s total electricity usage.<sup>16</sup> Within cities, this consumption ranges from 10% to 40% of the municipal energy budget depending on the number of lights and their efficiency. Rio de Janeiro consumes 60% more energy for public lighting than New York. A 2016 assessment reported that if the public lighting in Rio de Janeiro were replaced by LED lights, annual savings could reach US\$72 million and 110,000 tons of CO<sub>2</sub> emissions.<sup>17</sup> The annual savings Rio de Janeiro could achieve through upgrading its PLS could be used towards other social and environmental projects such as housing, sanitation and access to water that is insufficient in Rio’s underdeveloped neighborhoods.<sup>18</sup> As a result of the social and environmental benefits related to the modernization and improvement of the City’s lighting systems and related services, Sustainalytics views Smart Luz’s investments in LED lighting and other smart city infrastructure as having the potential to provide positive impacts for the City and its people.

**Alignment with/contribution to SDGs**

The SDGs were set in September 2015 by the United Nations General Assembly and form an agenda for achieving sustainable development by the year 2030. The bonds issued under the Smart Luz Sustainability Bond Framework advances the following SDGs and targets:

Use of Proceeds Category	SDG	SDG target
Modernization and Improvement of Rio de Janeiro’s Public Lighting System and Related Services	11. Sustainable Cities and Communities	11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums.
	7. Affordable and Clean Energy	7.3 By 2030, double the global rate of improvement in energy efficiency.
	9. Industry, Innovation, and Infrastructure	9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all

<sup>12</sup> Foreign Policy, “Brazil’s Murder Rate Finally Fell – And By A Lot”, (2020), at: <https://foreignpolicy.com/2019/04/22/brazils-murder-rate-finally-fell-and-by-a-lot/>

<sup>13</sup> Human Rights Watch, “World Report 2020: Brazil”, (2020), at: <https://www.hrw.org/world-report/2020/country-chapters/brazil#>

<sup>14</sup> U.S. Department of Energy report, “An Investigation of LED Street Lighting’s Impact on Sky Glow”, at: [https://www.energy.gov/sites/prod/files/2017/05/f34/2017\\_led-impact-sky-glow.pdf](https://www.energy.gov/sites/prod/files/2017/05/f34/2017_led-impact-sky-glow.pdf)

<sup>15</sup> World Bank, “Lighting Brazilian Cities: Business Models For Energy Efficient Public Street Lighting”, (2017), at: <https://documents1.worldbank.org/curated/en/679281521548635917/pdf/ESM-P150942-PUBLIC-LightingBrazilianCitiesReportENGLISHFINAL.pdf>

<sup>16</sup> ESMAP, “Helping Brazilian Cities Reduce Emissions by Switching to Energy-Efficient LED Street Lights”, (2016), at: <https://www.esmap.org/node/57541>

<sup>17</sup> Ibid

<sup>18</sup> IE University, “The Current Urban Reality of Rio de Janeiro: Light and Dark Sides of the Olympic Legacy”, (2018), at: <https://www.ie.edu/insights/articles/the-current-urban-reality-of-rio-janeiro-light-and-dark-sides-of-the-olympic-legacy/>

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## Conclusion

Smart Luz has developed the Smart Luz Sustainability Bond Framework under which it may issue sustainability bonds and use the proceeds to finance Eligible Activities. Sustainalytics considers that the Project expected to be funded by the sustainability bond proceeds is expected to provide positive environmental and social impacts for the City.

The Framework outlines a process by which proceeds will be tracked, allocated, and managed, and commitments have been made for reporting on the allocation and impact of the use of proceeds. Furthermore, Sustainalytics believes that the Framework is aligned with the overall sustainability strategy of the company and that the use of proceeds category will contribute to the advancement of the UN SDGs 7, 9, and 11. Additionally, Sustainalytics is of the opinion that Smart Luz has adequate measures to identify, manage and mitigate environmental and social risks commonly associated with the eligible projects funded by the use of proceeds.

Based on the above, Sustainalytics is confident that Smart Luz is well-positioned to issue sustainability bonds and that that the Framework is robust, transparent, and in alignment with the four core components of the Green Bond Principles (2021) and Social Bond Principles (2021).

## Appendix

### Appendix 1: Sustainability Bond / Sustainability Bond Programme - External Review Form

#### Section 1. Basic Information

Issuer name:	Smart Luz Concessionária de Iluminação Pública SPE S.A.
Sustainability Bond ISIN or Issuer Sustainability Bond Framework Name, if applicable:	Smart Luz Sustainability Bond Framework
Review provider's name:	Sustainalytics
Completion date of this form:	July 2, 2021
Publication date of review publication:	

#### Section 2. Review overview

##### SCOPE OF REVIEW

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

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

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Use of Proceeds        | <input checked="" type="checkbox"/> Process for Project Evaluation and Selection |
| <input checked="" type="checkbox"/> Management of Proceeds | <input checked="" type="checkbox"/> Reporting                                    |

##### ROLE(S) OF REVIEW PROVIDER

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Consultancy (incl. 2 <sup>nd</sup> opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification   | <input type="checkbox"/> Rating        |
| <input type="checkbox"/> Other ( <i>please specify</i> ):                       |  |

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

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

Please refer to Evaluation Summary above.

### Section 3. Detailed review

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

#### 1. USE OF PROCEEDS

Overall comment on section (*if applicable*):

The activities defined under the use of proceeds – Modernization and Improvement of Rio de Janeiro’s Public Lighting System and Related Services – are aligned with categories recognized by both the Green Bond Principles and/or Social Bond Principles, namely Energy Efficiency, Climate Change Adaptation, Affordable Basic Infrastructure, and Access to Essential Services. Sustainalytics considers that activities in the eligible category will lead to positive environmental or social impacts and advance the UN SDGs, specifically SDGs 7, 9, and 11.

#### Use of proceeds categories as per GBP:

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

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

#### Use of proceeds categories as per SBP:

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Affordable basic infrastructure   | <input checked="" type="checkbox"/> Access to essential services                        |
| <input type="checkbox"/> Affordable housing   | <input type="checkbox"/> Employment generation (through SME financing and microfinance) |
| <input type="checkbox"/> Food security  | <input type="checkbox"/> Socioeconomic advancement and empowerment                      |
| <input type="checkbox"/> Unknown at issuance but currently expected to conform with SBP categories, or other eligible areas not yet stated in SBP | <input type="checkbox"/> Other (please specify):  |

If applicable please specify the social taxonomy, if other than SBP:

## 2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (if applicable):

Smart Luz's Lenders' Independent Engineer and Bond guarantor were responsible for the due diligence and review of the construction costs and capital expenditure schedule associated with the pre-identified Eligible Activities to be financed per the criteria defined under the Framework. Sustainalytics considers the project selection process in line with market practice.

### Evaluation and selection

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Credentials on the issuer's social and green objectives                                 | <input checked="" type="checkbox"/> Documented process to determine that projects fit within defined categories               |
| <input checked="" type="checkbox"/> Defined and transparent criteria for projects eligible for Sustainability Bond proceeds | <input checked="" type="checkbox"/> Documented process to identify and manage potential ESG risks associated with the project |
| <input type="checkbox"/> Summary criteria for project evaluation and selection publicly available                           | <input type="checkbox"/> Other (please specify):  |

### Information on Responsibilities and Accountability

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Evaluation / Selection criteria subject to external advice or verification | <input type="checkbox"/> In-house assessment |
| <input type="checkbox"/> Other (please specify):   |  |

## 3. MANAGEMENT OF PROCEEDS

Overall comment on section (if applicable):

Smart Luz's management team will be responsible for the allocation of bond proceeds. In addition, Smart Luz's Controller will be responsible for overseeing internal controls including the execution of payments and managing fiscal compliance and accounting records. Smart Luz will hold the unallocated proceeds in an escrow account until full allocation. This is in line with market practice.

### Tracking of proceeds:

- |   |
|---|
| <input checked="" type="checkbox"/> Sustainability Bond proceeds segregated or tracked by the issuer in an appropriate manner |
| <input checked="" type="checkbox"/> Disclosure of intended types of temporary investment instruments for unallocated proceeds |
| <input type="checkbox"/> Other (please specify):  |

**Additional disclosure:**

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Allocations to future investments only                  | <input type="checkbox"/> Allocations to both existing and future investments |
| <input type="checkbox"/> Allocation to individual disbursements                             | <input type="checkbox"/> Allocation to a portfolio of disbursements          |
| <input checked="" type="checkbox"/> Disclosure of portfolio balance of unallocated proceeds | <input type="checkbox"/> Other (please specify):                             |

**4. REPORTING**

Overall comment on section (if applicable):

Smart Luz intends to publish Sustainability Report(s) on its website to report on the allocation and the impact of proceeds on an annual basis until full allocation. The allocation reporting is expected to include externally verified project-level details on the allocation of net proceeds, the balance of unallocated proceeds, along with semi-annual progress on the achievement of Eligible Activities, including comparison of actual physical-financial performance compared to contractual milestones. In addition, Smart Luz intends to report on relevant quantitative impact where feasible and has provided indicative metrics within the Framework. Sustainalytics views Smart Luz's allocation and impact reporting as aligned with market practice.

**Use of proceeds reporting:**

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Project-by-project | <input type="checkbox"/> On a project portfolio basis |
| <input type="checkbox"/> Linkage to individual bond(s) | <input type="checkbox"/> Other (please specify):      |

**Information reported:**

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Allocated amounts | <input type="checkbox"/> Sustainability Bond financed share of total investment |
| <input type="checkbox"/> Other (please specify):      |   |

**Frequency:**

- |  |                                      |
|--|--------------------------------------|
| <input checked="" type="checkbox"/> Annual       | <input type="checkbox"/> Semi-annual |
| <input type="checkbox"/> Other (please specify): |                                      |

**Impact reporting:**

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Project-by-project | <input type="checkbox"/> On a project portfolio basis |
| <input type="checkbox"/> Linkage to individual bond(s) | <input type="checkbox"/> Other (please specify):      |

**Information reported (expected or ex-post):**

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> GHG Emissions / Savings | <input checked="" type="checkbox"/> Energy Savings   |
| <input checked="" type="checkbox"/> Decrease in water use   | <input type="checkbox"/> Number of beneficiaries   |
| <input checked="" type="checkbox"/> Target populations      | <input checked="" type="checkbox"/> Other ESG indicators (please specify): Liquid effluent discharge volume; |

Disciplinary and discrimination complaints incidence; Child labor incidence; and Employee demographics that correspond to access to training, jobs, and wages.

**Frequency:**

- Annual  Semi-annual  
 Other (please specify):

**Means of Disclosure**

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

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

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

[www.smartluz.rio](http://www.smartluz.rio)

**SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE**

**Type(s) of Review provided:**

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

**Review provider(s):**

**Date of publication:**

**ABOUT ROLE(S) OF REVIEW PROVIDERS AS DEFINED BY THE GBP AND THE SBP**

- i. Second-Party Opinion: An institution with sustainability expertise that is independent from the issuer may provide a Second-Party Opinion. The institution should be independent from the issuer's adviser for its Sustainability Bond framework, or appropriate procedures such as information barriers will have been implemented within the institution to ensure the independence of the Second-Party Opinion. It normally entails an assessment of the alignment with the Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy, and/or processes relating to sustainability and an evaluation of the environmental and social features of the type of Projects intended for the Use of Proceeds.

- 
- ii. **Verification:** An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or sustainability criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally or socially sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Sustainability Bond proceeds, statement of environmental or social impact or alignment of reporting with the Principles may also be termed verification.
  - iii. **Certification:** An issuer can have its Sustainability Bond or associated Sustainability Bond framework or Use of Proceeds certified against a recognised external sustainability standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.
  - iv. **Green, Social and Sustainability Bond Scoring/Rating:** An issuer can have its Sustainability Bond, associated Sustainability Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialised research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental and/or social performance data, process relative to the Principles, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material sustainability risks.

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## About Sustainalytics, a Morningstar Company

Sustainalytics, a Morningstar Company, is a leading ESG research, ratings and data firm that supports investors around the world with the development and implementation of responsible investment strategies. The firm works with hundreds of the world's leading asset managers and pension funds who incorporate ESG and corporate governance information and assessments into their investment processes. The world's foremost issuers, from multinational corporations to financial institutions to governments, also rely on Sustainalytics for credible second-party opinions on green, social and sustainable bond frameworks. In 2020, Climate Bonds Initiative named Sustainalytics the "Largest Approved Verifier for Certified Climate Bonds" for the third consecutive year. The firm was also recognized by Environmental Finance as the "Largest External Reviewer" in 2020 for the second consecutive year. For more information, visit [www.sustainalytics.com](http://www.sustainalytics.com).



**Named**

2015: Best SRI or Green Bond Research or Rating Firm  
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The  
**Green Bond**  
Principles



The  
**Social Bond**  
Principles