

# Second-Party Opinion

## Equinix Green Finance Framework



### Evaluation Summary

Sustainalytics is of the opinion that the Equinix Green Finance Framework is credible and impactful and aligns with the four core components of the Green Bond Principles 2018 and the Green Loan Principles 2020. This assessment is based on the following:



**USE OF PROCEEDS** The eligible categories for the use of proceeds, Green Buildings, Renewable Energy, Energy Efficiency, Sustainable Water and Wastewater Management, Waste Management and Clean Transportation, are aligned with those recognized by the Green Bond Principles 2018 and the Green Loan Principles 2020. Sustainalytics considers that the eligible categories will lead to positive environmental impacts and advance the UN Sustainable Development Goals, specifically Goals 6, 7, 9, 11 and 12.



**PROJECT EVALUATION / SELECTION** Equinix has formed a dedicated Green Finance Committee, comprised of representatives from the Company's Sustainability Program Office, Legal, Treasury and Investor Relations teams, that is responsible for overseeing the project evaluation and selection process to ensure compliance with the Framework's eligibility criteria. Sustainalytics considers the project selection process to be in line with market practice.



**MANAGEMENT OF PROCEEDS** Equinix's Green Finance Committee will be responsible for allocating an amount equal to the proceeds from the Green Financing Instruments to an eligible green project portfolio. Pending full allocation, Equinix will hold or temporarily invest an amount equal to the unallocated balance of the proceeds in cash, cash equivalents and/or treasury securities. Equinix has defined a two-year look back period for Eligible Projects and intends to fully allocate in two-to-three years. Sustainalytics considers this to be in line with market practice.



**REPORTING** Equinix is committed to reporting on the allocation and impact of its green proceeds on an annual basis, until full allocation. Allocation reporting will include the total amount of proceeds allocated to Eligible Projects as well as the balance of unallocated proceeds and the amount or percentage of new financing vs. refinancing, while impact reporting will draw on several environmental impact metrics, where feasible. Sustainalytics views Equinix's allocation and impact reporting as aligned with market practice.

<b>Evaluation date</b>	August 27, 2020
<b>Issuer Location</b>	Redwood City, California, United States

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## Introduction

Equinix, Inc., together with its subsidiaries (“Equinix”, or the “Company”) is an American multinational data center and colocation provider with over 214 data centers across five continents. The Company is headquartered in Redwood City, California and, as of June 2020, has 9,000 employees and over 9,500 customers.

Equinix has developed the Equinix Green Finance Framework (the “Framework”) under which it may issue, incur, borrow or undertake a variety of financings<sup>1</sup> (“Green Financing instruments”) and use the proceeds to finance and/or refinance, in whole or in part, a portfolio of eligible green projects (the “Eligible Projects”) related to operations. The Framework defines eligibility criteria in six areas:

1. Green Buildings
2. Renewable Energy
3. Energy Efficiency
4. Sustainable Water and Wastewater Management
5. Waste Management
6. Clean Transportation

Equinix engaged Sustainalytics to review the Equinix Green Finance Framework, dated August 2020, and provide a Second-Party Opinion on the Framework’s environmental credentials and its alignment with the Green Bond Principles 2018 (GBP)<sup>2</sup> and the Green Loan Principles 2020 (GLP).<sup>3</sup> This Framework has been published in a separate document.<sup>4</sup>

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

Sustainalytics’ Second-Party Opinion reflects Sustainalytics’ independent<sup>5</sup> opinion on the alignment of the reviewed Framework with the current market standards and the extent to which the eligible categories are credible and impactful.

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

- The Framework’s alignment with the Green Bond Principles 2018, as administered by ICMA, and the Green Loan Principles 2020, as administered by LMA<sup>6</sup>;
- The credibility and anticipated positive impacts of the use of proceeds;
- 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 1.5, 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 Equinix’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. Equinix representatives have confirmed (1) they understand it is the sole responsibility of Equinix 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.

<sup>1</sup> Which may include Green Bonds, Green Loans, Green Schuldscheine, Green Commercial Paper, or Green Private Placements.

<sup>2</sup> The Green Bond Principles are administered by the International Capital Market Association and are available at <https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>.

<sup>3</sup> The Green Loan Principles are administered by the Loan Market Association and are available at [https://www.lma.eu.com/application/files/1815/8866/8537/Green\\_Loan\\_Principles\\_V03.pdf](https://www.lma.eu.com/application/files/1815/8866/8537/Green_Loan_Principles_V03.pdf)

<sup>4</sup> The Equinix Green Finance Framework is available on Equinix, Inc.’s sustainability website at: <https://sustainability.equinix.com/environment/our-environment-commitments/#green-bonds>

<sup>5</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.

<sup>6</sup> In addition to the Loan Markets Association, the GLP is also administered by the Asia Pacific Loan Market Association and the Loan Syndications & Trading Association

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 Equinix.

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 and loan proceeds but does not measure the actual impact. The 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 intended allocation of proceeds but does not guarantee the realized allocation of the bond and loan 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 favor or against, the truthfulness, reliability or completeness of any facts or statements and related surrounding circumstances that Equinix has made available to Sustainalytics for the purpose of this Second-Party Opinion.

## Sustainalytics' Opinion

### Section 1: Sustainalytics' Opinion on the Equinix Green Finance Framework

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

- Use of Proceeds:
  - The eligible categories, Green Buildings, Renewable Energy, Energy Efficiency, Sustainable Water and Wastewater Management, Waste Management and Clean Transportation, are aligned with those recognized by the GBP and GLP.
  - Equinix may use Green Financing proceeds to finance the design, construction and maintenance of green buildings and energy efficient data centers.
    - Third party certifications, such as LEED V4 (Gold and Platinum), Green Globes (three and four Globes), BREEAM (Very Good and above), Singapore BCA Green Mark (GoldPlus or better), SS564 Singapore Green Data Center Standard and NABERS (4.5 Stars or higher) will be used to determine eligibility. Sustainalytics views these certifications as credible and the levels selected as aligned with market practice. Sustainalytics recognizes that in the context of data centers, using LEED V4 Gold as the minimum qualifier provides a high level of positive impact and is a more stringent approach than market expectations in this field.
    - Data centers are also eligible if they have a target average annual Power Use Effectiveness (PUE) of 1.45 or lower. Sustainalytics notes positively that this threshold provides a higher degree of impact than market practice.
    - Sustainalytics recognizes the importance of reducing embodied carbon in buildings and highlights Equinix's ambition to address this issue by conducting whole building lifecycle analysis (WBLCA) to quantify the carbon emissions associated with the built environment of its data centers. Sustainalytics also notes positively Equinix's intent to, over time, develop a methodology to evaluate and benchmark the CO<sub>2</sub> intensity of its building materials.
  - The Framework includes the procurement of renewable energy<sup>7</sup> and installation of on-site renewable energy systems.

<sup>7</sup> Equinix's renewable energy purchases include wind, solar, small hydro, and biomass, all of which is certified in the country of origin.

- Equinix has disclosed that eligible electricity procurement will be done through long-term and project-tied contracts, which Sustainalytics considers to be in line with market practice.
- In addition to installing renewable energy generation systems such as solar panels or hydrogen fuel cells, the Framework considers eligible the costs associated with converting backup generators to run solely on carbon neutral and non-fossil fuels such as biodiesel and HVO. Sustainalytics views positively the intent to decarbonize all potential power sources, including backup generators,<sup>8</sup> and highlights that Equinix intends to include only expenditures related to system improvements and will not include the costs of fuel procurement within its Green Financing instruments.
- Within the category of energy efficiency, the Framework defines a variety of eligible investments.
  - For upgrades and retrofits, projects must deliver at least a 2% improvement in annual energy performance or position the building within the top 15% of its sector, measured by the Energy Star Industry Benchmark. Sustainalytics views positively this use of quantitative thresholds, noting that a 2% improvement in an energy-intensive sector represents significant absolute savings.
  - Specific project types are also deemed to be eligible, including energy optimization, innovative cooling, and the reuse of waste heat (for example for community energy projects). Sustainalytics considers these activities to be aligned with market practice, highlighting that the data centers run primarily on electricity and therefore are not directly exposed to fossil fuels.
- The Framework defines a variety of water management activities to be eligible, including the implementation of water-efficient cooling systems, water system improvements, reductions in chemical use in treatment, the reduction of stormwater runoff such as through the installation of green roofs, and rainwater capture. Sustainalytics views positively the intent of this category, while recognizing the diversity of intended environmental benefits and therefore encourages detailed reporting on the technologies implemented and the environmental benefits achieved.
- Eligible waste management expenditures are described as those relating to equipment takeback programs. Sustainalytics views recycling and reuse, aligned with the waste hierarchy, as in line with market expectations, while noting the importance of appropriate environmental and social risk management in the disposal of electronic waste.
- The Framework's clean transportation category focuses on the promotion of electric vehicles, namely through the installation of charging stations, and is therefore considered by Sustainalytics to be in line with market practice.
- Project Evaluation and Selection:
  - Equinix has formed a dedicated Green Finance Committee, comprised of representatives from the Company's Sustainability Program Office, Legal, Treasury and Investor Relations teams, that is responsible for overseeing the project evaluation and selection process to ensure compliance with the Framework's eligibility criteria. If necessary, the Committee will nominate additional parties during the project selection process to weigh in as subject matter experts.
  - Based on the clear delegation of responsibility and appropriate oversight, Sustainalytics considers this process to be in line with market practice.
- Management of Proceeds:
  - The Green Finance Committee will be responsible for allocating an amount equal to the proceeds from the Green Financing Instruments to an eligible green project portfolio. Proceeds will be tracked in accordance with the Company's existing internal tracking systems. Equinix has defined a two-year look back period for Eligible Projects and intends to fully allocate in no longer than two-to-three years.
  - The Company has committed to achieving, over time, a level of allocation for the eligible green project portfolio that matches or exceeds the balance of net proceeds from its outstanding green financings. If required, additional eligible green projects will be added to Equinix's green project portfolio to ensure that the net proceeds from outstanding proceeds will be fully allocated to eligible green projects.

<sup>8</sup> Back-up power sources are generally powered by fossil fuels, and Sustainalytics recognizes the level of ambition associated with replacing these generators with low-carbon alternatives.

- Pending full allocation, the Company will hold or temporarily invest an amount equal to the unallocated balance of the proceeds in cash, cash equivalents and/or treasury securities.
- Based on the presence of internal tracking systems and disclosure on temporary allocation of proceeds, Sustainalytics considers this process to be in line with market practice.
- Reporting:
  - Equinix is committed to reporting on the allocation and impact of its green proceeds at the category level and on an aggregated basis for all of Equinix's green bonds and other potential green funding that remains outstanding. Green financing reporting will be made available on the Company's website and will be conducted on an annual basis, until full allocation.
    - Allocation reporting will include the total amount of proceeds allocated to Eligible Projects, the balance of unallocated proceeds and the amount or the percentage of new financing vs. refinancing.
    - As part of its impact reporting, the Company will provide a description of the green projects and a breakdown of green projects by GBP category, and will draw on several environmental impact metrics, where feasible, such as energy savings, GHG emissions avoided and waste diverted from landfills.
  - Based on Equinix's commitment to allocation and impact reporting on an annual basis, Sustainalytics considers this process to be in line with market practice.

### Alignment with Green Bond Principles 2018 and Green Loan Principles 2020

Sustainalytics has determined that the Equinix Green Finance Framework aligns to the four core components of the GBP and GLP. For detailed information please refer to Appendix 2: Green Bond/Green Bond Programme External Review Form.

## Section 2: Sustainability Performance of Equinix

### Contribution of framework to Equinix, Inc.'s sustainability strategy

Sustainalytics is of the opinion that Equinix demonstrates a strong commitment to sustainability through a focus on four overarching objectives: (i) achieving 100% clean and renewable energy across its global portfolio; (ii) deploying best-in-class data center energy efficiency technologies, innovations and strategies for reducing energy consumption while addressing resilience and climate change; (iii) reducing its global carbon footprint across direct and indirect energy consumption with an increasing focus on indirect value chain emissions; and (iv) building and maintaining healthy and sustainable office settings for its employees.<sup>9</sup> In order for fulfill these commitments, and in line with its mission of "...maximizing the benefits of technology for all people while minimizing its impact on our planet.",<sup>10</sup> the Company tracks and reports on its performance in its annual Sustainability Report,<sup>11</sup> with a focus on the following areas: energy consumption, renewable energy, carbon footprint, green buildings, assurance, and on-site generation. Sustainalytics considers that the proceeds of the Green Financing Instruments issued under the Framework will contribute to Equinix's ability to fulfill all four of the environmental commitments outlined above.

In 2019, through power purchase agreements, the Company achieved 92% renewable energy use, totaling 5,250 GWh and representing a 58% increase from 2015. In the same year, Equinix installed 38 megawatts (MW) of fuel cells, generating 262,000 MWh amount of lower-carbon electricity. While its overall data center footprint and energy consumption has doubled since 2015, the Company has managed to decrease its Scope 2 carbon footprint by 60% as a result of its renewable energy efforts, equivalent to avoiding roughly 450,000 metric tons of CO<sub>2</sub>e in Scope 2. In order to achieve its commitments of a) deploying best-in-class data center energy efficiency technologies; and b) reducing its global carbon footprint, Equinix obtains recognized green building certifications and standards. As of 2019, Equinix had green building certifications or met reputable standards for approximately 16 million square feet of its data center gross space and offices, namely, LEED Silver or Gold, ISO 14001 or ISO 50001, representing 67% of its global gross square footage.<sup>12</sup> Further, the Company has mandated LEED accreditation or equivalent green building standards for all of its new

<sup>9</sup> Equinix, Sustainability Report 2019, at: <https://www.equinix.com/resources/infopapers/corporate-sustainability-report/>; also published as an interactive sustainability website, at: <https://sustainability.equinix.com/>

<sup>10</sup> *Ibid.*

<sup>11</sup> *Ibid.*

<sup>12</sup> Equinix, Green Data Centers, at: <https://www.equinix.com/data-centers/design/green-data-centers/>; and Equinix's Corporate Sustainability website, at: <https://sustainability.equinix.com/environment/innovation-building-green-data-centers/>

construction.<sup>13</sup> In addition to the outlined environmental initiatives, the Company has voluntarily received ISO 14064-3 Limited Assurance for energy, renewable energy and emissions on a recurring basis since 2015.

Overall, Sustainalytics is of the opinion that Eligible Projects defined in the Equinix Green Finance Framework will contribute to the Company's overall sustainability approach and key environmental initiatives, while encouraging the Company to set time-bound quantitative targets in the future.

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

While Sustainalytics recognizes that the net proceeds from the Green Financing Instruments issued under the Framework will be directed towards Eligible Projects that are expected to yield overall positive environmental impact, Sustainalytics is aware that such Eligible Projects could also lead to negative environmental and social outcomes. Some key risks associated with the Eligible Projects include environmental degradation and pollution risk surrounding its facilities as well as occupational health and safety risks.

Sustainalytics is of the opinion that Equinix can proactively manage and/or mitigate potential risks through the following policies and procedures:

- Equinix's global 'Code of Business Conduct'<sup>14</sup> (the "Code") outlines the guiding principles, standards and associated safeguards the Company has in place for its officers, directors and employees in multiple areas, including safety, human rights and the environment. In connection with the Code, Equinix provides mandatory trainings on compliance topics. For the sixth consecutive year, in 2019 100% of all employees completed the annual compliance training courses and 100% of all new hires completed the training within six months of being hired.<sup>15</sup>
- In addition to the Code, Equinix applies a 'Business Partner Code of Conduct'<sup>16</sup> to the Company's vendors, resellers, consulting partners, suppliers and service providers, which states the expectations the Company has for all of its business partners related to compliance with laws, regulations and rules around building a safe and inclusive work environment, as well as providing safety training when appropriate.
- Equinix participates in the annual CDP Climate Change Survey where it measures the impact of its operations on the environment. The CDP Climate Change data provides additional context around how Equinix performs beyond strictly economic measures and demonstrates its commitment to ongoing transparency and accountability around climate change and environmental impact.<sup>17</sup>
- Equinix has an enterprise-wide Global Health, Safety and Environmental (HSE) Standard Policy.<sup>18</sup> In addition to mandating compliance with all applicable environmental, health and safety laws and regulations, the Company uses the HSE Standard Policy to promote strong internal procedures and reporting mechanisms to ensure that all business activities are being conducted in a responsible manner on an ongoing basis.
- Equinix obtains recognized external certifications such as ISO 14001, which includes air and water pollution requirements that must be adhered to in order to mitigate adverse impacts of facilities, as well as ISO 50001 Environmental Management Systems which provides a framework for energy management.<sup>19</sup>
- In 2019, the Company transitioned to ISO 45001 (Occupational Health and Safety Standard) for all of its EMEA data centers, which requires that the Company demonstrate ongoing efforts towards controlling and improving its safety measures.<sup>20</sup>

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

### **Section 3: Impact of Use of Proceeds**

All six use of proceeds categories are aligned with those recognized by the GBP and GLP. Sustainalytics has focused on below where the impact is specifically relevant in the local context.

<sup>13</sup> *Ibid.*

<sup>14</sup> Equinix, Code of Business Conduct, at: <http://investor.equinix.com/static-files/3fd56e06-44ac-4739-91dd-e6a6de7b7522>

<sup>15</sup> Equinix, Corporate Sustainability Program, Governance, at: <https://sustainability.equinix.com/governance/>

<sup>16</sup> Equinix, Business Partner Code of Conduct, at: <http://investor.equinix.com/static-files/308078c9-5f93-434d-9488-5e8464f367f7>

<sup>17</sup> Equinix, CDP Climate Change Survey: <https://www.equinix.com/resources/infopapers/2019-cdp-climate-change-survey/>

<sup>18</sup> Equinix, Corporate Sustainability Program, Safe Workplaces, at: <https://sustainability.equinix.com/social/im-safe/>

<sup>19</sup> Equinix, Green Data Centers, at: <https://www.equinix.com/data-centers/design/green-data-centers/>

<sup>20</sup> Equinix, Corporate Sustainability Program, Safe Workplaces, at: <https://sustainability.equinix.com/social/im-safe/>

### The importance of energy efficiency, renewable energy and green built environment for data center facilities

Data centers are by their very nature energy-intensive facilities; it is estimated that global data center electricity demand in 2019 was approximately 200 terawatt hours (TWh), or around 0.8% of global final electricity demand.<sup>21</sup> According to the U.S. Department of Energy, data centers consume 10-50 times more energy per unit of floor space, on average, than commercial office buildings, and collectively make up approximately 2% of the country's total electricity consumption.<sup>22</sup> Despite the high energy demands associated with such infrastructure, rapid improvements and investments in technological developments have allowed data centers to operate more efficiently and have helped to substantially limit energy demand growth from both data centers and transmission networks.<sup>23</sup> A study conducted in 2020 found that while global data center compute instances increased by 550% between 2010 and 2018, global data center energy use only grew by 6% over the same time period on an absolute basis.<sup>24</sup> Further, the International Energy Agency predicts that if current trends in hardware efficiency and data center infrastructure are maintained, global data center energy demand can remain almost flat till 2022, despite a projected 60% increase in service demand.<sup>25</sup> The most common measure of energy efficiency in a data center is the PUE, which is the ratio of total energy consumed (including lighting and cooling) to the power consumed by IT systems/equipment. Although this metric is just one indicator to assess energy performance of data centers,<sup>26</sup> it is generally accepted as an industry standard metric. While overtime, PUE values have trended downwards across the data center industry due to both technological improvements as well as a greater focus on environmental sustainability<sup>27</sup>, the global average PUE for data centers was reported to be 1.59 in July 2020, representing only a slight improvement from 2019.<sup>28</sup> In this context, Sustainalytics views Equinix's threshold of a target average annual PUE of less than or equal to 1.45 to exceed market practice and industry standards.

While heightened environmental awareness and increased efforts to improve PUE values through efficient equipment has been positive, data centers remain large consumers of electrical power, with some scenarios projecting that global electricity usage will grow anywhere between 3-13% by 2030,<sup>29</sup> translating into increased energy demands. With such high energy demands, the emissions intensity of the electricity being used can have significant impacts on greenhouse gas emissions if the source of the electricity is fossil-fuel-fired generation. In order to offset this impact, many data center operators have opted to source their electricity from renewable power generators, as well as developing on-site renewable energy systems. In this context, Sustainalytics views Equinix's commitment to project-specific long-term PPA's to be particularly impactful, and is of the opinion that the projects in renewable energy category will contribute to Equinix's ability to fulfill its long-term commitment of sourcing 100% of its electricity needs from renewable sources. Sustainalytics also notes positively Equinix's ambition to move beyond the scope of its electricity consumption by decarbonizing potential power sources through the conversion of its onsite backup generators to instead rely on carbon-neutral non-fossil fuels.

Sustainalytics also recognizes that data centers are unique structures that face different environmental challenges than other building types. The majority of a data center's energy demand relates to IT process loads (including the operation of servers and data networks) and cooling loads (due to the high amount of heat generated by the computer equipment). For example, one European study notes that the power used for cooling accounts for nearly 40% of energy use in data centers, and may be as high as 61% at some energy inefficient facilities.<sup>30</sup> Facilities using water-cooling technology may also have environmental impacts related to water management. Compared to the typical building type, a lower portion of the environmental impact is due to conventional factors such as building structure and envelope, construction materials, fixtures, waste generation, and indoor environments. In order to address the unique demands of a data center, a number of recognized green building certification schemes have issued additional criteria. For example, the LEED

<sup>21</sup> International Energy Agency, 'Data Centres and Data Transmission Networks', June 2020, at: <https://www.iea.org/reports/data-centres-and-data-transmission-networks>

<sup>22</sup> US Department of Energy, 'Data Centers and Servers', at: <https://www.energy.gov/eere/buildings/data-centers-and-servers>

<sup>23</sup> International Energy Agency, 'Data Centres and Data Transmission Networks', June 2020, at: <https://www.iea.org/reports/data-centres-and-data-transmission-networks>

<sup>24</sup> Data Center Knowledge, 'Data Centers Responsible for 1 Percent of All Electricity Consumed Worldwide', February 2020, at: <https://www.datacenterknowledge.com/energy/study-data-centers-responsible-1-percent-all-electricity-consumed-worldwide>

<sup>25</sup> International Energy Agency, 'Data Centres and Data Transmission Networks', June 2020, at: <https://www.iea.org/reports/data-centres-and-data-transmission-networks>

<sup>26</sup> Science Direct, 'Power usage effectiveness in data centers: overload and underachieving', May 2016, at: <https://www.sciencedirect.com/science/article/pii/S1040619016300446>

<sup>27</sup> MDPI, Energies, 'Trends in Data Centre Energy Consumption', September 2017, at: <http://www.mdpi.com/1996-1073/10/10/1470/pdf>

<sup>28</sup> Uptime Institute, 10<sup>th</sup> Annual Uptime Institute data center survey 2020: [https://drift-lp-](https://drift-lp-66680075.drift.click/UptimeInstituteGlobalDataCenterSurvey2020)

[66680075.drift.click/UptimeInstituteGlobalDataCenterSurvey2020](https://drift-lp-66680075.drift.click/UptimeInstituteGlobalDataCenterSurvey2020)

<sup>29</sup> MDPI, 'On Global Electricity Usage of Communication Technology: Trends to 2030', 2015, at: <https://www.mdpi.com/2078-1547/6/1/117>

<sup>30</sup> MDPI, Energies, 'Trends in Data Centre Energy Consumption', September 2017, at: <http://www.mdpi.com/1996-1073/10/10/1470/pdf>

standard establishes additional requirements for minimum energy performance and optimized energy performance, altering the way that credits are earned in these categories. To date, Equinix has undertaken LEED Silver, Gold and Platinum for a number of its facilities, and has committed to using proceeds from its Green Financing Instruments for facilities that have achieved a minimum of LEED V4 Gold, in addition to other equivalent green building standards. In this context, Sustainalytics views positively the targeted levels indicated by Equinix, and in particular notes that Equinix is taking a leadership position by including Gold as the minimum level for LEED V4.

Sustainalytics is of the opinion that Equinix's consideration of energy efficiency measures, renewable energy procurement, and recognized green building standards will significantly reduce the environmental footprint associated with the operation of its data centers, leading to an overall positive environmental impact

#### Alignment with/contribution to SDGs

The Sustainable Development Goals (SDGs) were set in September 2015 and form an agenda for achieving sustainable development by the year 2030. This Green Finance Framework advances the following SDG goals and targets:

Use of Proceeds Category	SDG	SDG target
Green Buildings	9. Industry, Innovation and Infrastructure	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.
Renewable Energy	7. Affordable and Clean Energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
Energy Efficiency	7. Affordable and Clean Energy	7.3 By 2030, double the global rate of improvement in energy efficiency.
Sustainable Water and Wastewater Management	6. Clean Water and Sanitation	6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity
Waste Management	12. Responsible Consumption and Production	12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse
Clean Transportation	11. Sustainable Cities and Communities	11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

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## Conclusion

Equinix has developed the Equinix Green Finance Framework under which it will issue Green Financing Instruments and the use of proceeds to finance green eligible projects related to its operations. Sustainalytics considers that the projects funded by the Green Financing Instruments will create significant environmental benefits.

The Equinix Green Finance 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 Equinix Green Finance Framework is aligned with the overall sustainability strategy of the company and that the green use of proceeds categories will contribute to the advancement of the UN Sustainable Development Goals 6, 7, 9, 11 and 12. Additionally, Sustainalytics is of the opinion that Equinix 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 Equinix, Inc., is well-positioned to issue Green Financing Instruments and that the Equinix Green Finance Framework is robust, transparent, and in alignment with the four core components of the Green Bond Principles 2018 and Green Loan Principles 2020.

## Appendices

### Appendix 1: Overview of Green Building Certification Schemes

	LEED <sup>31</sup>	Green Globes <sup>32</sup>	BREEAM <sup>33</sup>	SS 564 Singapore Green Data Center Standard <sup>34</sup>	Singapore BCA Green Mark <sup>35</sup>	NABERS <sup>36</sup>
<b>Background</b>	Leadership in Energy and Environmental Design (LEED) is a US Certification System for residential and commercial buildings used worldwide. LEED was developed by the non-profit U.S. Green Building Council (USGBC) and covers the design, construction, maintenance and operation of buildings.	Green Globes, administered by the US Green Building Initiative, is a building certification used primarily in Canada, as well as the US. Originally based off of the BREEAM standard, and re-worked to under the specifications of the Canadian Standards Association (CSA) and the American National Standards Institute (ANSI).	BREEAM (Building Research Establishment Environmental Assessment Method) was first published by the Building Research Establishment (BRE) in 1990. Based in the UK. Used for new, refurbished and extension of existing buildings.	SS 564 is a green data center standard which helps organizations establish systems and processes in order to improve the energy performance of their data center. The standard is modelled after the ISO 50001 standard on energy management, but is specifically catered to meet the needs of data centers in Singapore through a Plan-Do-Check-Act (PDCA) methodology that encourages	The BCA Green Mark Scheme provides real estate certifications in Singapore to promote sustainability in the built environment (during project conceptualization and design, as well as during construction.)	The National Australian Built Environment Rating System (NABERS) is a performance rating tool for existing buildings in Australia. It is administered by the Australian New South Wales, Office of Environment and Heritage (OEH), and is used to measure building's energy efficiency, carbon emissions, water consumed, waste produced, and compare it with similar buildings.  The Better Building Partnership (collaboration between property owners to improve the sustainability of existing commercial building stock in the UK) and the OEH are adapting, trialing and

<sup>31</sup> USGBC, LEED: <https://www.usgbc.org/leed>

<sup>32</sup> Green Globes: <http://www.greenglobes.com/home.asp>







<sup>33</sup> BREEAM: <https://www.breeam.com/>

<sup>34</sup> SS 564 Singapore Green Data Center Standard: <https://www.epi-ap.com/services/9/18/109/SS564>

<sup>35</sup> Singapore BCA Green Mark: [https://www.bca.gov.sg/greenmark/green\\_mark\\_buildings.html](https://www.bca.gov.sg/greenmark/green_mark_buildings.html)

<sup>36</sup> NABERS: <https://www.nabers.gov.au/ratings>

				continuous improvement. The standard can be used to audit and certify an organization's environmental management system for its data center(s).		implementing the NABERS Energy for Offices programme so that new office developments in the UK can be certified.
<b>Certification levels</b>	<ul style="list-style-type: none"> <li>• Certified</li> <li>• Silver</li> <li>• Gold</li> <li>• Platinum</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Globe</li> <li>• 2 Globes</li> <li>• 3 Globes</li> <li>• 4 Globes</li> </ul>	<ul style="list-style-type: none"> <li>• Pass</li> <li>• Good</li> <li>• Very good</li> <li>• Excellent</li> <li>• Outstanding</li> </ul>	N/A	<ul style="list-style-type: none"> <li>• Certified</li> <li>• Gold</li> <li>• Gold Plus</li> <li>• Platinum</li> </ul>	<ul style="list-style-type: none"> <li>• 1-star (Poor)</li> <li>• 2-stars (Below Average)</li> <li>• 3-stars (Average)</li> <li>• 4-stars (Good)</li> <li>• 5-stars (Excellent)</li> <li>• 6-stars (Market Leading)</li> </ul>
<b>Areas of Assessment:</b>	<ul style="list-style-type: none"> <li>• Energy and Atmosphere</li> <li>• Sustainable Sites</li> <li>• Location and Transportation</li> <li>• Materials and Resources</li> <li>• Water Efficiency</li> <li>• Indoor Environmental Quality</li> <li>• Innovation in Design</li> <li>• Regional Priority</li> </ul>	<ul style="list-style-type: none"> <li>• Project Management</li> <li>• Site</li> <li>• Energy</li> <li>• Water</li> <li>• Materials &amp; Resources</li> <li>• Emissions</li> <li>• Indoor Environment</li> </ul>	<ul style="list-style-type: none"> <li>• Management</li> <li>• Energy</li> <li>• Land Use and Ecology</li> <li>• Pollution</li> <li>• Transport</li> <li>• Materials</li> <li>• Water</li> <li>• Waste</li> <li>• Health and Wellbeing</li> <li>• Innovation</li> </ul>	<ul style="list-style-type: none"> <li>• ICT Equipment and Services</li> <li>• Cooling</li> <li>• DC Power</li> </ul>	<ul style="list-style-type: none"> <li>• Climate Responsive Design</li> <li>• Building Energy Performance</li> <li>• Resource Stewardship</li> <li>• Smart and Healthy Buildings</li> <li>• Advanced Green Efforts</li> </ul>	<p>There are several ratings available based on the type of building and the applicant (building tenant, or owner and/or manager). The rating tools available for office buildings are:</p> <ul style="list-style-type: none"> <li>• Energy (without Greenpower)</li> <li>• Energy (with Greenpower)</li> <li>• Carbon Neutral</li> <li>• Waste</li> <li>• Water</li> <li>• Indoor Environment</li> </ul>
<b>Specific Criteria for Data Centers?</b>	Yes, additional minimum requirements and altered calculation methodology in energy section.	No	Yes, re-weighted categories to give extra emphasis to relevant criteria (energy and water).	Only applicable to data centers	Yes, different categories and weightings from general-purpose green mark score, emphasizing energy efficiency	Yes, there is a separate rating system for data centers (IT equipment, infrastructure, whole facility) with a set of benchmarking tools for measuring energy efficiency and environmental impact.

<p><b>Requirements</b></p>	<p>Prerequisites (independent of level of certification) and credits with associated points.</p> <p>These points are then added together to obtain the LEED level of certification</p> <p>There are several different rating systems within LEED. Each rating system is designed to apply to a specific sector (e.g. New Construction, Major Renovation, Core and Shell Development, Schools- /Retail- /Healthcare New Construction and Major Renovations, Existing Buildings: Operation and Maintenance).</p>	<p>Score-based performance levels, with 1,000 total points available. The number of points available in each category varies on the certification type (i.e. new construction or existing building). A score of 35% (350 points) must be obtained in order to receive the lowest (1 Globe) rating.</p> <p>The evaluation system combines web-based submissions by the project team and remote and on-site assessments by qualified third party assessors.</p> <p>Qualification systems exist for New Construction (NC), Existing Buildings (EB), and Sustainable Interiors (SI).</p>	<p>Prerequisites depending on the levels of certification and credits with associated points This number of points is then weighted by item and gives a BREEAM level of certification, which is based on the overall score obtained (expressed as a percentage). Majority of BREEAM issues are flexible, meaning that the client can choose which to comply with to build their BREEAM performance score. BREAAAM has two stages/ audit reports: a 'BREEAM Design Stage' and a 'Post Construction Stage', with different assessment criteria.</p>	<p>SS 564 does not mandate any minimum requirements that must be met other than the objectives and targets set by the organization in support of its data center sustainability policy. The standard does however require organizations to establish and maintain an energy and environmental management system in order to achieve continual improvement of energy and water performance in its data center. This includes aligning with best practices in the design of a sustainable data center by using relevant indicators such as PUE and WUE to represent improvement over time.</p>	<p>Prerequisites for each performance area (to demonstrate minimum criteria met), and numerical scores achieved in accordance with the criteria in each performance area. Performance Areas have different weights.</p> <p>Depending on the level of building performance and numerical score achieved in performance area, building's level of certification is determined.</p> <p>Assessment of compliance with Green Mark criteria is done by the Singapore Building and Construction Authority (BCA).</p>	<p>NABERS ratings for office buildings and tenancies are based on 12 months of (real) operational data, rather than potential performance estimate.</p> <p>There is a Carbon Neutral Certification available, as an extension to NABERS Energy rating, for buildings of NABERS Energy rating of 4-stars or above.</p> <p>There are rating system for different types of buildings, including apartment buildings, office buildings, office tenancies, shopping centers, data centers, and hotels.</p>
<p><b>Performance display</b></p>						
<p><b>Qualitative Considerations</b></p>	<p>Widely recognised internationally, and strong assurance of overall quality.</p>	<p>Limited recognition outside of North America.</p>	<p>Used in more than 70 countries: Good adaptation to the local normative context. Predominant environmental focus. Minimum standards less strict than LEED.</p>	<p>Widely used in Singapore. Adoption of the SS 564 standard can result in up to 30% in energy savings. As there are no minimum thresholds, organizations certified under</p>	<p>Strongly applicable in local market. Is officially licensed by the government of Singapore.</p>	<p>NABERS Energy is eligible in Australia and in the UK.</p> <p>In the UK, the certification is expected to pay attention to how the building performs in operation, compared to EPCs that focus on the theoretical performance of a</p>

				<p>this standard may perform differently based on the industry or sector that they operate in.</p>		<p>building's design under standard conditions of use (i.e. introducing a shift from environmental performance of the design and the in-use energy performance of the buildings).</p>
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## Appendix 2: Green Bond / Green Bond Programme - External Review Form

### Section 1. Basic Information

<b>Issuer name:</b>	Equinix, Inc.
<b>Green Bond ISIN or Issuer Green Bond Framework Name, if applicable:</b>	Equinix Green Finance Framework
<b>Review provider's name:</b>	Sustainalytics
<b>Completion date of this form:</b>	August 27, 2020
<b>Publication date of review publication:</b>	

### 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:

- |  |  |
|--|--|
| <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 eligible categories for the use of proceeds, Green Buildings, Renewable Energy, Energy Efficiency, Sustainable Water and Wastewater Management, Waste Management and Clean Transportation, are aligned with those recognized by the Green Bond Principles 2018 and the Green Loan Principles 2020. Sustainalytics considers that the eligible categories will lead to positive environmental impacts and advance the UN Sustainable Development Goals, specifically Goals 6, 7, 9, 11 and 12.

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

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Renewable energy  | <input checked="" type="checkbox"/> Energy efficiency  |
| <input checked="" 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 checked="" type="checkbox"/> Clean transportation   |
| <input checked="" type="checkbox"/> Sustainable water and wastewater management   | <input type="checkbox"/> Climate change adaptation   |
| <input type="checkbox"/> Eco-efficient and/or circular economy adapted products, production technologies and processes                            | <input checked="" 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 GBP | <input type="checkbox"/> Other (please specify):   |

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

**2. PROCESS FOR PROJECT EVALUATION AND SELECTION**

Overall comment on section (if applicable):

Equinix has formed a dedicated Green Finance Committee, comprised of representatives from the Company's Sustainability Program Office, Legal, Treasury and Investor Relations teams, that is responsible for overseeing the project evaluation and selection process to ensure compliance with the Framework's eligibility criteria. Sustainalytics considers the project selection process to be in line with market practice.

**Evaluation and selection**

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Credentials on the issuer's environmental sustainability 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 Green Bond proceeds | <input checked="" type="checkbox"/> Documented process to identify and manage potential ESG risks associated with the project |
| <input checked="" type="checkbox"/> Summary criteria for project evaluation and selection publicly available       | <input type="checkbox"/> Other ( <i>please specify</i> ):   |

**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 ( <i>please specify</i> ):  |  |

**3. MANAGEMENT OF PROCEEDS**

Overall comment on section (*if applicable*):

Equinix's Green Finance Committee will be responsible for allocating an amount equal to the proceeds from the Green Financing Instruments to an eligible green project portfolio. Pending full allocation, Equinix will hold or temporarily invest an amount equal to the unallocated balance of the proceeds in cash, cash equivalents and/or treasury securities. Equinix has defined a two-year look back period for Eligible Projects, and intends to fully allocate in two-to-three years. Sustainalytics considers this to be in line with market practice.

**Tracking of proceeds:**

- |   |
|---|
| <input checked="" type="checkbox"/> Green 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 ( <i>please specify</i> ):   |

**Additional disclosure:**

- |  |   |
|--|---|
| <input type="checkbox"/> Allocations to future investments only                  | <input checked="" 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 type="checkbox"/> Disclosure of portfolio balance of unallocated proceeds | <input type="checkbox"/> Other ( <i>please specify</i> ):                               |

**4. REPORTING**

Overall comment on section (*if applicable*):

Equinix is committed to reporting on the allocation and impact of its green proceeds on an annual basis, until full allocation. Allocation reporting will include the total amount of proceeds allocated to Eligible Projects as well as the balance of unallocated proceeds and the amount or percentage of new financing vs. refinancing, while impact reporting will draw on several environmental impact metrics, where feasible. Sustainalytics views Equinix's allocation and impact reporting as aligned with market practice.

**Use of proceeds reporting:**

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

**Information reported:**

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Allocated amounts  | <input type="checkbox"/> Green Bond financed share of total investment |
| <input checked="" type="checkbox"/> Other ( <i>please specify</i> ): Balance of unallocated proceeds; amount or the percentage of new financing and refinancing. |  |

**Frequency:**

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

**Impact reporting:**

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

**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 checked="" type="checkbox"/> Other ESG indicators ( <i>please specify</i> ): Several additional environmental impact metrics as outlined in the Framework. |

**Frequency**

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

**Means of Disclosure**

- |  |   |
|--|---|
| <input type="checkbox"/> Information published in financial report | <input type="checkbox"/> Information published in sustainability report                 |
| <input type="checkbox"/> Information published in ad hoc documents | <input checked="" type="checkbox"/> Other ( <i>please specify</i> ): Company's website. |

- 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.sustainability.equinix.com](http://www.sustainability.equinix.com)

**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 INDEPENDENT REVIEW PROVIDERS AS DEFINED BY THE GBP**

- i. Second-Party Opinion: An institution with environmental expertise, that is independent from the issuer may issue a Second-Party Opinion. The institution should be independent from the issuer's adviser for its Green Bond framework, or appropriate procedures, such as information barriers, will have been implemented within the institution to ensure the independence of the Second-Party Opinion. It normally entails an assessment of the alignment with the Green Bond Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability, and an evaluation of the environmental features of the type of projects intended for the Use of Proceeds.
- ii. Verification: An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or environmental criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Green Bond proceeds, statement of environmental impact or alignment of reporting with the GBP, may also be termed verification.
- iii. Certification: An issuer can have its Green Bond or associated Green Bond framework or Use of Proceeds certified against a recognised external green standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.
- iv. Green Bond Scoring/Rating: An issuer can have its Green Bond, associated Green Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialised research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental performance data, the process relative to the GBP, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material environmental risks.

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**Named**  
2015: Best SRI or Green Bond Research or Rating Firm  
2017, 2018, 2019: Most Impressive Second Opinion Provider

