

Second-Party Opinion

GS E&C Sustainable Financing Framework



Evaluation Summary

Sustainalytics is of the opinion that the GS Engineering & Construction Corp's ("GS E&C") Sustainable Financing Framework is credible and impactful and aligns with the Green Bond Principles 2018 ("GBP"), Social Bond Principles 2020 ("SBP"), Sustainability Bond Guidelines 2018 ("SBG") and Green Loan Principles 2020 ("GLP"). This assessment is based on the following:



USE OF PROCEEDS The eligible categories for the use of proceeds - Energy Efficiency, Renewable Energy, Resource Efficiency and Pollution Prevention and Control, Sustainable Water and Wastewater Management, Affordable Housing and Basic Infrastructure - are aligned with those recognized by the GBP, SBP, SBG and GLP. Sustainalytics considers that the eligible categories will lead to positive environmental or social impacts and advance the UN Sustainable Development Goals, specifically SDG 7, 11 and 12.



PROJECT EVALUATION / SELECTION GS E&C has established a Sustainable Financing Working Group who is responsible for project evaluation and selection, reviewing eligibility of existing projects and managing future updates to its Sustainable Finance Framework. The Chief Financial Officer is responsible for final selection of shortlisted projects. Sustainalytics considers the project selection process in line with market practice.



MANAGEMENT OF PROCEEDS GS E&C's finance team will be responsible for management of proceeds. GS E&C commits to allocating proceeds within 24 months of issuance. Unallocated proceeds within this period will be held in cash or cash equivalents or used to repay existing debt under general credit facilities. GS E&C will maintain a register which will track the use of proceeds raised under each sustainable finance transaction. This is in line with market practice.



REPORTING GS E&C intends to report allocation of proceeds on its website on an annual basis until full allocation or in case of any material changes. In addition, the company is committed to reporting on relevant impact metrics such as - annual energy saving, annual GHG emissions reduced/avoided, renewable energy produced, and number of redevelopment and rebuilding projects. GS E&C commits to publicly disclose the allocation and impact reports on its website. Sustainalytics views GS E&C's allocation and impact reporting as aligned with market practice.

Evaluation date	September 3, 2020
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Issuer Location	Seoul, South Korea
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Introduction

GS Engineering & Construction Corp (“GS E&C”, or the “Company”) is a South Korea based company operating in the construction and engineering industry. The Company operates in five business sectors: plant, power generation and distribution, architecture and housing, infrastructure, and leisure. GS E&C constructs plants and refineries for gas, waste and water treatment facilities, builds offices, manufacturing facilities, as well as constructs houses for both the public and private sectors. Headquartered in Seoul, the Company employs about 6,700 employees.

GS E&C has developed the GS E&C Sustainable Financing Framework (the “Framework”) under which it intends to issue one or multiple sustainability bond(s), raise loans and other form of debt financing instruments, the proceeds of which will be used to finance and/or refinance, in whole or in part, existing and/or future projects that reduce its environmental footprint and increase affordable housing opportunities for low income households. The Framework defines eligibility criteria in five areas:

1. Energy Efficiency
2. Renewable Energy
3. Resource Efficiency and Pollution Prevention and Control
4. Sustainable Water and Wastewater Management
5. Affordable Housing and Basic Infrastructure

GS E&C engaged Sustainalytics to review the GS E&C Sustainable Financing Framework, dated August 2020, and provide a Second-Party Opinion on the Framework’s environmental and social credentials and its alignment with the SBG. This Framework has been published in a separate document.¹

Scope of work and limitations of Sustainalytics Second-Party Opinion

Sustainalytics’ Second-Party Opinion reflects Sustainalytics’ independent² 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, Social Bond Principles 2020, Sustainability Bond Guidelines 2018 and Green Loan Principles 2020 as administered by ICMA;³
- 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 GS E&C’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. GS E&C representatives have confirmed (1) they understand it is the sole responsibility of GS E&C 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.

¹ The GS E&C Sustainable Financing Framework is available on GS Engineering & Construction Corp’s website at:

<http://www.gsenc.com/en/Management/System/System.aspx>

² 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.

³ 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/>

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 GS E&C.

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

Sustainalytics' Opinion

Section 1: Sustainalytics' Opinion on the GS E&C Sustainable Financing Framework

Sustainalytics is of the opinion that the GS E&C Sustainable Financing Framework is credible, impactful and aligns with the four core components of the Green Bond Principles 2018, Social Bond Principles 2020 and Green Loan Principles 2020 (GLP). Sustainalytics highlights the following elements of GS E&C's Sustainability Bond Framework:

- Use of Proceeds:
 - The eligible categories, Energy Efficiency, Renewable Energy, Resource Efficiency and Pollution Prevention and Control, Sustainable Water and Wastewater Management, Affordable Housing and Basic Infrastructure, are aligned with those recognized by the GBP, SBP and GLP.
 - Under the Energy Efficiency category, GS E&C will finance energy efficient material and equipment for its commercial and residential buildings and in its construction activities. These measures include – smart grids, LED lighting, sensor operated equipment and energy management systems that allow for energy storage and load optimization.
 - Under the Renewable Energy category, GS E&C will finance production of renewable energy through on-shore wind projects, on-shore and off-shore solar projects, and small-scale hydro projects (≤ 20 MW). GS E&C has confirmed that under onshore solar activities, the company may include both on-site solar installation and Concentrated Solar Power (CSP) projects. While GS E&C has confirmed the exclusion of fossil fuel projects through their exclusionary criteria (see footnote 7), Sustainalytics notes that CSP projects may rely on fossil fuel backup power sources, and encourages GS E&C to report on and limit the use of fossil fuel backup sources, if any. Sustainalytics considers inclusion of hydroelectric power projects of less than 20 MW to be in line with market practice. Sustainalytics notes that GS E&C commits to complying with national and international regulations pertaining to environmental and social risks management during the construction phase of hydro-power plants, where relevant.
 - Under the Resource Efficiency and Pollution Prevention and Control category GS E&C plans to invest in:
 - Facilities that produce pre-fabrication modular components to minimize construction waste. The company estimates the use of prefabricated components will result in the reduction of construction waste of 15%. Sustainalytics encourages GS E&C to report on a baseline year and measurement for this reduction target. Sustainalytics notes that while the use of pre-fabrication components at construction sites are known to reduce

waste on-site,⁴ it may not always result in reduction of overall construction waste.^{5,6} Sustainalytics further encourages GS E&C to procure energy efficient materials for prefabrication components to increase positive environmental and social impacts.

- Projects that enable the recycling or reuse of electric vehicle batteries. Sustainalytics notes that recycling of electronic waste, specifically batteries, can pose certain environmental and social risks and encourages the company to develop policies mitigating risks arising from electronic waste recycling, and report on the impact of these activities.
- Under the Sustainable Water and Wastewater Management category, GS E&C plans to finance grey water collection, treatment and recycling facilities. The Company will also invest in water and sanitation programs which include – water harvesting, water efficiency measures, water recycle and reuse technologies such as ion exchange facilities and zero liquid discharge facilities.
- Under its social project categories, GS E&C will finance Affordable Housing and Basic Infrastructure. This entails the redevelopment of deteriorated residential areas for low income families. GS E&C defines low-income individuals as per the Korean Ministry of Health and Welfare (MOHW) and Ministry of Education (MOE)’s classification, which is based on household income. Sustainalytics views GS E&C’s targeting of low income households positively, and encourages the Company, where feasible, to take further measures to ensure affordability, and report on the impact achieved.
- Sustainalytics views GS E&C’s exclusion of certain industries⁷ from eligibility consideration under the Framework positively.
- Project Evaluation and Selection:
 - GS E&C has established a Sustainable Financing Working Group (“SFWG” or the “Group”) responsible for project evaluation and selection.
 - The SFWG comprises of representatives from various departments including – finance, human resources, legal, compliance, business division and corporate sustainability divisions.
 - The SFWG is expected to meet every 12 months to review and select projects as per eligibility criteria mentioned in the Framework. The Group will also be responsible for managing future updates to the Framework and remove projects from eligibility where appropriate.
 - The Chief Financial Officer will be responsible for final approval of shortlisted projects.
 - Based on the establishment of a formal group with cross-departmental representation, which validates the eligibility of projects, Sustainalytics considers this process to be in line with market practice.
- Management of Proceeds:
 - GS E&C’s finance team will be responsible for managing proceeds raised under the Framework.
 - The proceeds of each bond raised under the Framework will be deposited in the general funding accounts and an amount equal to the net proceeds will be earmarked for allocation to eligible projects.
 - GS E&C commits to allocate proceeds to eligible projects within 24 months and to maintain a register which will track the use of proceeds raised under each sustainable finance transaction. This register will contain information pertaining to (i) type of funding transaction, such as - issuer entity, ISIN number, transaction and maturity date, principal of proceeds, amortization profile, interest or coupon rate etc. (ii) allocation of proceeds, including – name and description of eligible projects, allocation of proceeds to projects, balance of unallocated proceeds etc.
 - Unallocated proceeds will be held in cash or cash equivalents, or used to repay existing borrowings under general credit facilities of GS E&C.

⁴ Nick Natsoulis, How Prefabrication Benefits The Construction Industry, June 2020, at: <https://www.ny-engineers.com/blog/how-prefabrication-benefits-the-construction-industry>

⁵ Zhengdao Li Et al., Measuring the impact of prefabrication on construction waste reduction: an empirical study in Shenzhen, China, 2014, at: http://ira.lib.polyu.edu.hk/bitstream/10397/18060/1/Li_Measuring_Impact_Prefabrication.pdf

⁶ McKinsey & Company, Modular construction: From projects to products, June 2019, at: <https://www.mckinsey.com/~media/mckinsey/industries/capital%20projects%20and%20infrastructure/our%20insights/modular%20construction%20from%20projects%20to%20products%20new/modular-construction-from-projects-to-products-full-report-new.ashx>

⁷ GS E&C excludes the following industries from eligibility considerations: Luxury sectors (precious metals wholesale or brokerage, precious minerals wholesale or brokerage, artworks and antiques wholesale or brokerage), child labour and forced labour, adult entertainment, weapon, alcohol, tobacco, fossil fuel, nuclear, and hydro power with installed capacity >20MW

- Based on GS E&C's commitment to allocate proceeds within 24 months, its policy for temporarily holding unallocated proceeds and its commitment to track proceeds on an on-going basis, Sustainalytics considers GS E&C's process to manage proceeds to be in line with market practice.
- Reporting:
 - Within a year from the date of issuance, GS E&C commits to providing an allocation and impact report. In addition, the Company will annually report on allocation and impact metrics until funds have been fully allocated or in case of any material development.
 - GS E&C commits to publicly disclose the allocation and impact reports on its website.
 - Some of the metrics that GS E&C will report on include annual energy savings (MWh/GWh), annual GHG emissions reduced/avoided in tonnes of CO2 equivalent, decrease in concentration of fine dust in construction sites, renewable energy produced (MWh), number of redevelopment and rebuilding projects of deteriorated residential areas, number of SMEs funded.
 - Sustainalytics considers GS E&C's reporting process to be in line with market practice.

Alignment with Sustainability Bond Guidelines 2018

Sustainalytics has determined that the GS E&C Sustainable Financing Framework aligns to the four core components of the Green Bond Principles (2018), Social Bond Principles (2020) and Green Loan Principles (2020). For detailed information please refer to Appendix 1: Sustainability Bond/ Sustainability Bond Programme External Review Form.

Section 2: Sustainability Strategy of GS E&C

Contribution of Framework to GS Engineering & Construction Corp's sustainability strategy

Sustainalytics is of the opinion that GS E&C demonstrates a strong commitment to sustainability. The Company's vision is to be a 'sustainable global company' and defines its sustainability strategies as per the triple bottom line approach⁸ - in the area of environment, economy and society.⁹

GS E&C sets as an environmental objective to "minimize environmental impact with eco-friendly construction methods and company-wide environmental management", and to operationalize this by (i) creating eco-friendly worksites (ii) enhancing environmental management system and (iii) reducing GHG emission and energy consumption.¹⁰ Some of the Company's environmental targets and progress include:¹¹

- Reducing companywide GHG emissions by 31.86% by 2050 compared to its business as usual scenario. GS E&C seeks to reduce its GHG emissions by implementing energy efficient measures and undertaking eco-friendly activities, some of which include use of LED lights and reducing travel of its employees. In the year 2019, GS E&C reduced its GHG emissions by 8,550tCO2-e. Sustainalytics notes the positive intention of these emission reduction measures, while encouraging GS E&C to disclose a baseline year and emissions amounts upon which these reductions are measured.
- GS E&C seeks to make buildings resource efficient through its energy-efficient building design technology, which analyzes and optimizes a building's life cycle energy consumption from the design to production and consumption stage. In 2019 GS E&C applied this technology to 15 of its projects.
- GS E&C has a goal of achieving a waste recycling rate of 90% by 2020. To achieve this goal the Company has established internal recycling procedures for construction waste (sludge) and has also set up waste management guidelines.
- GS E&C recognizes the need to decrease its wastewater discharge in order to reduce its environmental impact. The Company treats wastewater produced from its construction sites and reuses the treated wastewater to clean its vehicles and roads.¹² In 2019, the Company improved its wastewater recycled rate to 27.6% as compared to the 9.8% recycle rate it achieved in 2018.¹³

⁸ Triple bottom line approach measures the financial, social, and environmental performance of a company over time.

⁹ GS E&C, Sustainability Management, accessed on August 2020, at: <http://www.gsenc.com/en/Management/System/System.aspx>

¹⁰ GS E&C, Exploring New Frontiers, GS E&C Integrated Report 2019, at:

http://www.gsenc.com/FileUpload/Bbs_New/2019%20Integrated%20Report_en.pdf

¹¹ GS E&C, Exploring New Frontiers, GS E&C Integrated Report 2019, at:

http://www.gsenc.com/FileUpload/Bbs_New/2019%20Integrated%20Report_en.pdf

¹² GS E&C, Exploring New Frontiers, GS E&C Integrated Report 2019, at:

http://www.gsenc.com/FileUpload/Bbs_New/2019%20Integrated%20Report_en.pdf

¹³ GS E&C, Exploring New Frontiers, GS E&C Integrated Report 2019, at:

http://www.gsenc.com/FileUpload/Bbs_New/2019%20Integrated%20Report_en.pdf

Sustainalytics is of the opinion that the GS E&C Sustainable Financing Framework is aligned with the company's overall sustainability strategy and initiatives and will further the Company's action on its key environmental priorities.

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

While the eligible categories are recognized as impactful by the Sustainability Bond Guidelines 2018, Green Bond Principles 2018, Social Bond Principles 2020 and Green Loan Principles 2020, Sustainalytics recognizes that the eligible projects may lead to potential negative environmental and social risks such as emissions, effluents, and waste generated during construction, occupational health and safety risks, public opposition and stakeholder management, land use and biodiversity issues.

Sustainalytics is of the opinion that GS E&C is able to manage and/or mitigate potential risks through implementation of the following:

- GS E&C commits to adhering to the conditions outlined under the United Nations' Universal Declaration of Human Rights and the Guiding Principles on Business and Human Rights as well as International Labor Organization's core conventions. The company is a signatory to the United Nations Global Compact (UNGC), and has established a 'Human Rights Statement' under which it outlines requirements for its own operations, suppliers and partners to adhere to in order to promote respect for human rights and prevention of any human rights violation, as well as its commitment to respond to infringement cases that have been reported.¹⁴ Some of these requirements include: No discrimination based on gender, race, age, disability, religion, academic background; creation of clean and transparent transactions and maintenance of fair trade, active participation in environmental/social problem solving for the local community etc.
- GS E&C has also established a Code of Ethics System which consists of an Ethics Charter, Code of Ethics, and Guidelines for Ethical Practice. This ethics systems helps instill and strengthen ethical values among its employees, management, and partners. It acts as an guide for employee code of conduct, shareholder and investor protection, as well as environmental safety, enabling responsible growth of the Company. To ensure proper implementation and regular updates, GS E&C has an Ethics Committee responsible for monitoring and inspecting cases of ethical violations, voting on ethical policy-related issues, assisting top management in making ethical decisions and improving ethical awareness in the Company. GS E&C also conducts regular inspections to ensure that projects are carried out as per Company policies and enforces disciplinary action in case of violations.¹⁵
- GS E&C has a Health, Safety and Environment (HSE) policy, under which it outlines its HSE practices, including accomplishing zero incidents, zero pollution and zero ill-health. Under this policy, GS E&C conducts internal and external audits to ensure compliance with ISO 45001 Occupational Health & Safety certification and ISO 14001 Environmental Management System Certification.¹⁶
- As part of its CSR Risk Management Policy GS E&C conducts inspections of its suppliers and partners for issues related to safety management.¹⁷ However, Sustainalytics notes that in the last five years, GS E&C has had a high rate of industrial accidents. Between 2015 and 2019 GS E&C reported the highest injury rate amongst construction companies in South Korea at 25.1.¹⁸ Over this period 1,440 of its workers were injured, and 22 died.¹⁹ In addition, in the second quarter of 2020, 4 workers of GS E&C have died due to safety related failures.²⁰
- GS E&C recognizes that fine dust emitted from its construction sites is an issue and risk for nearby residents. In 2019, GS E&C joined the "Voluntary Agreement for High-concentration Fine Dust Reduction" led by the Korean Ministry of Environment. By signing this agreement GS E&C is expected to establish measures for fine dust reduction in its construction sites. Sustainalytics encourages the company to outline and disclose its quantitative reduction targets for these activities. GS E&C also

¹⁴ GS E&C, Ethics Management, accessed in August 2020, at: <http://www.gsenc.com/en/Management/Ethics/Ethics.aspx#none>

¹⁵ GS E&C, Exploring New Frontiers, GS E&C Integrated Report 2019, at:

http://www.gsenc.com/FileUpload/Bbs_New/2019%20Integrated%20Report_en.pdf

¹⁶ GS E&C, Health Safety and Environment Policy, March 2020, at: http://www.gsenc.com/resource/images/en/download/file_env_env_en.pdf

¹⁷ GS E&C, Exploring New Frontiers, GS E&C Integrated Report 2019, at:

http://www.gsenc.com/FileUpload/Bbs_New/2019%20Integrated%20Report_en.pdf

¹⁸ Injury rate has been calculated by GS E&C multiplying 10,000 times the number of injured persons divided by the cumulative number of workers. GS E&C's cumulative labor force was 573,103, the number of injured was 1440, and 22 deaths were recorded during the period 2015 to 2019.

¹⁹ Busan, SK E&C killed two people in Busan alone in the second quarter, July 2020, at:

<http://www.busan.com/view/busan/view.php?code=2020072313211483184>

²⁰ Busan, SK E&C killed two people in Busan alone in the second quarter, July 2020, at:

<http://www.busan.com/view/busan/view.php?code=2020072313211483184>

commits to comply with South Korean environmental regulations such as Environmental Impact Assessment Act, Clean Air Conservation Act, Water Environment Conservation Act and Wastes Control Act and environment-related permits and authorizations where necessary.

- To achieve sustainable growth, GS E&C in 2019 engaged with 322 external stakeholders including shareholders, partners, customers, local residents, government and relevant institution to identify material issues.²¹ As a result of this consultation, GS E&C identified 15 critical issues that promote transparent and responsible functioning of the Company.²²

Based on these policies, standards and assessments, Sustainalytics is of the opinion that GS E&C has sufficient measures to identify, manage and mitigate environmental and social risks commonly associated with the use of proceeds. Sustainalytics encourages the Company to further establish publicly available risk management policies and integrate community consultation processes in the design and construction phase of all large infrastructure projects.

Section 3: Impact of Use of Proceeds

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

Importance of increasing renewable energy capacity in South Korea

South Korea's primary energy consumption relies heavily on fossil fuel consumption. In 2017, the country derived 87% of its primary energy from fossil fuels,²³ about 14% from nuclear and only 2% from renewables.²⁴ South Korea's heavy reliance on fossil fuel makes it vulnerable to climate risks. Recognizing these risks, under the Paris Agreement South Korea pledged to reduce its domestic greenhouse gas emissions by 37% as compared to its business as usual scenario. The country under its 2017 Renewable Energy 3020 Implementation Plan has set a goal to produce 20% of its energy from renewable sources by 2030,²⁵ and is proposing to make this goal more ambitious by pushing for a 35% renewable energy target by 2040.²⁶ As the eighth largest energy consumer in 2017, it is critical that South Korea decarbonize its energy sector.²⁷ Sustainalytics is of the opinion that GS E&C's Renewable Energy projects will help reduce the country's reliance on fossil fuel and achieve its climate goals.

Importance of wastewater management to mitigate water scarcity risks

As a result of rapid industrialization and urbanization during the 1970's, South Korea experienced water shortages as well as degradation of its aquifers in the 1990s.²⁸ Although the government has since implemented several policies that seek to tackle the problem of deteriorating water quality, the problem of water pollution still persists in some regions, especially around the more urbanized regions around its capital Seoul.²⁹ The World Resources Institute assesses South Korea to have an overall medium to high water stress, further highlighting the relevance of projects around sustainable water management in the country.³⁰ With increased seasonality and regional variability of mean and extreme precipitation, with the rainfall variation likely to increase over time, the water stress is likely to increase if appropriate water and wastewater management plans in place.

Sustainalytics is of the opinion that the GS E&C financing of water and wastewater infrastructure, particularly wastewater treatment facilities will help improve the quality of South Korea's water resources and will

²¹ GS E&C, Exploring New Frontiers, GS E&C Integrated Report 2019, at:

http://www.gsenc.com/FileUpload/Bbs_New/2019%20Integrated%20Report_en.pdf

²² GS E&C, Exploring New Frontiers, GS E&C Integrated Report 2019, at:

http://www.gsenc.com/FileUpload/Bbs_New/2019%20Integrated%20Report_en.pdf

²³ Of the 87% of primary energy that South Korea derives from fossil fuels, 29% comes from coal, 44% from petroleum and 14% from natural gas.

²⁴ EIA, South Korea, July 2018, at: https://www.eia.gov/international/content/analysis/countries_long/South_Korea/south_korea.pdf

²⁵ IEA, Korea Renewable Energy 3020 Plan, September 2020, at: <https://www.iea.org/policies/6569-korea-renewable-energy-3020-plan>

²⁶ Renewables now, South Korea targets 30-35% renewable power share by 2040, accessed on 20 August 2020, at:

<https://renewablesnow.com/news/south-korea-targets-30-35-renewable-power-share-by-2040-651499/>

²⁷ EIA, South Korea, July 2018, at: https://www.eia.gov/international/content/analysis/countries_long/South_Korea/south_korea.pdf

²⁸ AZO Cleantech, South Korea: Environmental Issues, Policies and Clean Technology, July 2015, at:

<https://www.azocleantech.com/article.aspx?ArticleID=552#:~:text=As%20a%20result%20of%20the,this%20country%20since%20the%201990s.&text=W,ile%20water%20quality%20is%20considered,or%20filter%20their%20tap%20water.>

²⁹ Portland State University, South Korea's polluted river basin, July 2018, at: <https://www.sciencedaily.com/releases/2018/07/180712100519.htm>

³⁰ The World Resources Institute, Water Stress by Country, accessed on September 2020, at: <https://www.wri.org/resources/charts-graphs/water-stress-country>

therefore create positive environmental impact by supporting the establishment of sustainable water management systems.

Impact of redeveloping deteriorated residential areas of South Korea to support affordable housing

South Korea's government over the last 40 years has proactively sought to address the problem of housing shortages and improving the quality of dwellings in the country by undertaking measures designed to mitigate widespread housing shortages and deficiencies in quality. At the same time, housing prices in South Korea have experienced a steep rise. In the Seoul Metropolitan region in particular, prices have increased by almost 50% in the last eight years.³¹ This context further highlights the problem of housing affordability in urban areas especially to youth, low income-groups and other vulnerable population groups.³² South Korea's government recently announced over 20 different policies which include measures such as raising capital-gains taxes, in order to curb the increase in housing prices in the country.

Sustainalytics is of the opinion that GS E&C's investment in redeveloping houses in deteriorated residential neighborhoods for low-income households can promote availability of affordable homes and thereby support the government's effort.

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 sustainability bond advances the following SDG goals and targets:

Use of Proceeds Category	SDG	SDG target
Energy Efficiency	7. Affordable and Clean Energy	7.3 By 2030, double the global rate of improvement in energy efficiency
Renewable Energy	7. Affordable and Clean Energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
Resource efficiency and Pollution Prevention and Control	12. Responsible consumption and production	12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse
Sustainable Water and Wastewater Management	12. Responsible consumption and production	12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment
Affordable Housing and Basic Infrastructure	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

Conclusion

GS E&C has developed the GS E&C Sustainable Financing Framework under which it will issue sustainability bonds and use the proceeds to finance environmental and social projects. Sustainalytics considers that the projects funded by the sustainability bond proceeds will improve GS E&C's environmental performance as well as create positive social impact in the communities in which it operates.

The GS E&C Sustainable Financing 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 GS E&C Sustainable Financing Framework is aligned with the overall sustainability strategy of the company and that the use of proceeds categories will contribute to the advancement of the UN Sustainable Development Goals 7, 10, 11 and 12. Additionally, Sustainalytics is of

³¹ The Wall Street Journal, Korea's Radical Housing-Boom Crackdown Is a Sign of Things to Come, July 2020, at: <https://www.wsj.com/articles/koreas-radical-housing-boom-crackdown-is-a-sign-of-things-to-come-11594808708>

³² Eun-Cheol Park, Won-Seok Nam, Su-Kyoung Kim, Geun-Sang Oh, The Seoul Institute, accessed on August 18, at: <http://global.si.re.kr/content/affordable-rented-housing-strategies-seoul>

the opinion that GS E&C 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 GS Engineering & Construction Corp is well-positioned to issue sustainability bonds and that that GS E&C Sustainable Financing Framework is robust, transparent, and in alignment with the four core components of the Green Bond Principles (2018), Social Bond Principles (2020) and Green Loan Principles (2020).

Appendices

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

Section 1. Basic Information

Issuer name:	GS Engineering & Construction Corp
Sustainability Bond ISIN or Issuer Sustainability Bond Framework Name, if applicable:	GS E&C Sustainable Financing Framework
Review provider's name:	Sustainalytics
Completion date of this form:	September 2, 2020
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 nd 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 - Energy Efficiency, Renewable Energy, Resource Efficiency and Pollution Prevention and Control, Sustainable Water and Wastewater Management, Affordable Housing and Basic Infrastructure - are aligned with those recognized by the GBP, SBP, SBG and GLP. Sustainalytics considers that the eligible categories will lead to positive environmental or social impacts and advance the UN Sustainable Development Goals, specifically SDG 7, 10, 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 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 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): Resource Efficiency |

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

Use of proceeds categories as per SBP:

- | | |
|---|---|
| <input type="checkbox"/> Affordable basic infrastructure | <input type="checkbox"/> Access to essential services |
| <input checked="" 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):

GS E&C has established a Sustainable Financing Working Group who is responsible for project evaluation and selection, reviewing eligibility of existing projects and managing future update to its Sustainable Finance Framework. The Chief Financial Officer is responsible for final selection of shortlisted projects. 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 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 (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)*:

GS E&C's finance team to be responsible for management of proceeds. GS E&C commits to allocating proceeds within 24 months of issuance. Unallocated proceeds within this period will be held in cash or cash equivalents or used to repay existing debt under general credit facilities. GS E&C to maintain a register which will track the use of proceeds raised under or each sustainable finance transaction. 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 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 checked="" 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):

GS E&C intends to report allocation of proceeds on its website on an annual basis until full allocation or in case of any material changes. In addition, the company is committed to reporting on relevant impact metrics such as - annual energy saving, annual GHG emissions reduced/avoided, renewable energy produced, and number of redevelopment and rebuilding projects. GS E&C commits to publicly disclose the allocation and impact reports on its website. Sustainalytics views GS E&C'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 (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 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 (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 checked="" type="checkbox"/> Number of beneficiaries |
| <input type="checkbox"/> Target populations | <input type="checkbox"/> Other ESG indicators (please specify): Number of redevelopment and rebuilding projects of deteriorated residential areas, Number and type of disadvantaged communities helped |

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): Information to be published on Company 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.)

Link to where the Framework will be available: <http://www.gsenc.com/en/Management/System/System.aspx>

SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE

Type(s) of Review provided:

- ☐ Consultancy (incl. 2nd 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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The issuer is fully responsible for certifying and ensuring the compliance with its commitments, for their implementation and monitoring.

In case of discrepancies between the English language and translated versions, the English language version shall prevail.

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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.



Named

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

