Executive Summary

External Sustainability and Resilience Appraisal of the Vertically Integrated Cargo Community (VICC™) at Los Angeles International Airport

Louis Downing, CEO
Lorena Zemp, SuRe® Programme Director
The Standard for Sustainable and Resilient Infrastructure

September 2020
About SuRe® - The Standard for Sustainable and Resilient Infrastructure

SuRe® – the Standard for Sustainable and Resilient Infrastructure is a third-party-verified, global voluntary standard, developed through a multi-stakeholder approach incorporating inputs from developed and emerging nations to drive the integration of sustainability and resilience aspects into infrastructure development and upgrade by providing guidance and serving as a globally applicable common language tool for infrastructure project developers, financiers and public sector institutions. The Standard assesses infrastructure throughout the project life cycle at the design, construction and operational phases. SuRe® consists of 14 themes covering 61 criteria across environmental, social and governance (ESG) factors in addition to two general reporting requirements for impact measurement.

The SuRe® Standard is science and evidence-based. As such, SuRe® includes input from scientists and experts on an on-going basis to reflect new findings and understandings in the relevant frameworks for Infrastructure, Sustainability, and Resilience. SuRe® was developed following the ISEAL Alliance Codes of Good Practice for standard setting. The SuRe® Standard builds on existing initiatives and encourages Good International Industry Practice (GIIP) in line with the most relevant international frameworks and the Sustainable Development Goals (SDGs). SuRe® does not favor a particular technology or patented item over another; it rather builds up on existing efforts and encourages best international practice in line with the relevant frameworks for Infrastructure Sustainability and Resilience.

About Global Infrastructure Basel Foundation

Global Infrastructure Basel Foundation (GIB) is the scheme owner of SuRe®. GIB is a Swiss foundation based in Basel, Switzerland, working to promote sustainable and resilient Infrastructure through sustainable Infrastructure design and financing on a global scale. Active since 2008, GIB works with multiple stakeholders such as city representatives, project developers and Infrastructure financiers, with a focus on emerging and developing countries. GIB envisions a world where sustainable and resilient Infrastructure is the norm rather than the exception, as such GIB supports the development and financing of sustainable and resilient Infrastructure through numerous initiatives and activities including the SuRe® Standard, which GIB has developed together with the French investment bank Natixis.

About Guggenheim Investments

Guggenheim Investments (GI) is the asset management and investment advisory division of Guggenheim Partners, a global diversified financial services firm. GI has more than $220 billion in total assets across fixed income, equity, and alternative strategies. GI focuses on the return and risk needs of insurance companies, corporate and public pension funds, sovereign wealth funds, endowments and foundations, consultants, wealth managers, and high-net-worth investors. As a global asset manager, GI seeks to deliver exceptional, long-term value to its clients while managing its business with strong governance, sustainable business practices, and a workplace built on respect and community engagement. GI’s work in pursuing sustainable development goals seeks to advance safe, reliable infrastructure and financing innovation in ways that preserve and protect the environment and contribute to a better world.

---

1 Guggenheim Investments assets under management are as of 6.30.2020. The assets include leverage of $18bn for assets under management. Guggenheim Investments represents the following affiliated investment management businesses of Guggenheim Partners, LLC: Guggenheim Partners Investment Management, LLC, Security Investors, LLC, Guggenheim Funds Distributors, LLC, Guggenheim Funds Investment Advisors, LLC, Guggenheim Corporate Funding, LLC, Guggenheim Partners Europe Limited, GS GAMMA Advisors, LLC, and Guggenheim Partners India Management. Guggenheim Investments has not made any commitment to participate, and may not participate, in the project on behalf of its client accounts.
Foreword by Scott Minerd

The infrastructure asset class has grown among institutional investors, asset managers, developers, and the public sector because of its attractiveness as a long-lived asset, but more importantly because of its potential to have a positive economic, environmental, and social impact on our societies. The key to unlocking significant amounts of institutional capital for sustainable infrastructure development projects is establishing and adopting a set of consistent methodologies and metrics for measurement and accounting. The challenge we face is that the accounting and assessment tools for sustainable infrastructure investing is relatively underdeveloped compared to certain other, more mature asset classes.

Guggenheim has been at the forefront of the efforts to meet this challenge. As part of our work we developed what we call the Sustainability Quotient, which identifies the four characteristics that a sustainable infrastructure project must possess before institutional capital would be committed — financial return, positive social impact, environmental responsibility, and transparent governance. To advance the Sustainability Quotient we partnered with the Stanford Global Projects Center to identify and analyze infrastructure sustainability standards. This landmark study established a base from which to launch a series of three infrastructure sustainability research reports that will be released in the summer of 2020.

The second of these reports, prepared by the Global Infrastructure Basel Foundation (GIB), presents the results of an assessment of an existing infrastructure project using the SuRe® Standard—the Standard for Sustainable and Resilient Infrastructure. SuRe® is a third-party-verified, global voluntary standard that seeks to serve as a globally applicable common language tool for infrastructure project developers, financiers and public sector institutions. GIB works to advance the SuRe® Standard in cooperation with supporters and partners such as the World Wildlife Fund, Guggenheim Investments, and the European Investment Bank, the lending arm of the European Union.

The project that is being assessed, the Vertically Integrated Cargo Community (VICC™), is a pre-construction phase automated air cargo facility at Los Angeles Airport that is also conceptualized as a base for integrating retail, food and commercial activities. As part of the SuRe® certification process, the project is assessed to determine if it is compliant with the material SuRe® environmental, social and governance (ESG) criteria for the level of certification pursued (Bronze, Silver and Gold).

The work of GIB in advancing the SuRe® standard for practical use and widespread adoption is a momentous contribution to the field of sustainable development. I want to commend the team at GIB, led by CEO Louis Downing and Lorena Zemp, director of the SuRe® program, and the project team at VICC™ for their work in this important endeavor.

Scott Minerd
Chairman of Investments and Global Chief Investment Officer
Guggenheim Partners
This Executive Summary accompanies the author’s Final Assessment of the External Sustainability and Resilience Appraisal of the Vertically Integrated Cargo Community (The VICC™).

**Context: The Sustainable Infrastructure Imperative Today**

The world is changing at an unprecedented rate. Human populations are changing habits and choices leading to rapid urbanization, demographic changes, population increase in some geographies, and population collapse in others. Global inequality has never been more acute with 44% of the world’s wealth owned by 1% of the population. Our relationship with nature is leading to the rapid destruction of the ecological life support system upon which we depend, as exemplified by the extinction of 200-2000 species every year, and the impacts climate change to ecosystems, agriculture and damage to the built environment. 2020 has witnessed the shock of a global pandemic, the full consequences of which are yet to be seen. With about 1.6 billion informal workers losing 60% of their income countries and investors are looking at ways to contribute to reviving the economy after months of lock-down, trying to find ways in which building back better can be implemented for a safer, more sustainable, more resilient and inclusive future. Infrastructure, the backbone of society, is considered as one of the best methods of boosting the economic activity of a country in post-crisis recovery times, with studies indicating a significant increase in GDP as a result of infrastructure investment when compared with other asset classes.

In these unprecedented and uncertain times, infrastructure investments must be made selectively for those projects that best meet the needs of the future sustainably and with resilience to future shocks and stresses. By future proofing infrastructure assets, there exist several advantages to investors, including better risk-adjusted returns, low correlation to other asset classes, relatively stable cash yields and inflation protection. However, standards and assessment frameworks are needed to ensure that assets are indeed built to be sustainable and resilient.

This report aims to serve as a practical example of how sustainability requirements have been implemented and assessed in an infrastructure project early in its planning and

---

2 Source: Vollset, Stein Emil et al; Fertility, mortality, migration, and population scenarios for 195 countries and territories from 2017 to 2050: a forecasting analysis for the Global Burden of Disease Study (2020); The Lancet. Available at: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30677-2/fulltext

3 Source: Credit Suisse (2019); Global Wealth Report: 2019


6 “...an increase of 1 percentage point of GDP in investment spending raises the level of output by about 0.4 percent in the same year and by 1.5 percent four years after the increase” Source: International Monetary Fund (IMF); IMF ‘The time is right for an infrastructure push’ (2014). Available at: https://www.imf.org/external/np/ey/news/articles/2015/09/28/04/53/093014a
design stage by using a global infrastructure sustainability assessment tool: SuRe® – The Standard for Sustainable and Resilient Infrastructure. The objective of SuRe® is two-fold: (1) to support project developers in understanding how their asset is performing and can be improved in ESG considerations and (2) to support potential project investors in acquiring a deeper understanding on how ESG considerations are implemented and assessed in infrastructure projects and inspire them in contributing to a more sustainable, resilient and safe future through their investment decisions.

The Assessed Project: Vertically Integrated Cargo Community

The project assessed is an innovative Vertically Integrated Cargo Community (The VICC™) proposed for construction at the Los Angeles International Airport (LAX) in the United States of America (U.S.A). The VICC™ has an estimated Capital cost of USD $1.12 billion, and is in early stages of development (pre-detailed design). The project is being developed through a private partnership including Airis (the lead project developer) and CCR (the lead project partner providing financing and operational services). Parcel 1, which was the focus of this assessment, is part of a 45.11-acre site on which the VICC™ is proposed to be developed, having a capacity of 4.5 million tons of cargo throughput (which is approximately 2.2 times greater than pre-VICC™ scenario) on a land surface area approximately one-fifth of the total area currently assigned to this function. The VICC™ therefore, with an extremely efficient land utilization factor, can much better support the current LAX’s forecasted volume needs than business as usual scenario which fall short of this demand.

The project demonstrated several features which are potentially transformative to the cargo industry at this location. The project not only demonstrated that it will bring efficient performance and cost saving opportunities but also that it will go above and beyond regulation in several regards, committing to implementing ESG considerations that will contribute, along with other activities, to an estimated 9.82 billion USD net benefits for the airport and surrounding community.

The Assessment Standard: SuRe®

Selecting the right assessment tool is also critical to obtaining a holistic ESG appraisal of the performance and areas of opportunity of the project. Different tools will target or highlight different ESG aspects with varying degrees of assurance. The SuRe® Standard for Sustainable and Resilient Infrastructure developed by Global Infrastructure Basel Foundation (GIB), is a holistic third-party voluntary certification system which encourages

---

7 Parcel 1: See full SuRe® External Sustainability and Resilience Appraisal of the VICC report for a detailed description of Parcel 1. (2020); Global Infrastructure Basel Foundation.
8 Source: VICC™ Proposal (2018); pg. 193, Airis.
good international industry practice\(^9\) or better, in line with the most relevant international sustainability frameworks, including the Sustainable Development Goals (SDGs). The SuRe\(^®\) Standard, which comprises of 61 ESG criteria, can be applied and assessed in different ways, depending on the needs of the interested stakeholders.

In the case of the VICC\(^™\), the team opted for a sustainability and resilience appraisal based on the SuRe\(^®\) Standard. Although the appraisal doesn’t result in the issuance of a certificate (as does the full SuRe\(^®\) certification process), it is a recommend first step in order to: (1) determine the readiness of the project to undergo a full SuRe\(^®\) certification and; (2) provide insights into the project’s current ESG performance, areas of high performance and areas of improvement.

Table 1. Summary of SuRe\(^®\) Standard Requirements

<table>
<thead>
<tr>
<th>SuRe(^®) Standard Requirements</th>
<th>3 Dimensions</th>
<th>14 Themes</th>
<th>61 Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Governance</strong></td>
<td>Management and Oversight</td>
<td></td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Sustainability and Resilience Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stakeholder Engagement</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Anti-corruption and Transparency</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Society</strong></td>
<td>Human Rights</td>
<td></td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Labor Rights and Working Conditions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Community Protection</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Customer Focus and Community Involvement</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Socioeconomic Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Environment</strong></td>
<td>Climate</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Biodiversity and Ecosystems</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Resource Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pollution</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Land Use and Landscape</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Assessment Process

The GIB Foundation assessed the VICC™ using its SuRe® sustainability appraisal methodology, designed for projects in pre-construction and pre-detailed design stages. The appraisal enables project developers to understand and commit to future compliance to SuRe® criteria at later stages of project development, for example, through project design modifications or the adoption of additional policies for sustainability and resilience management.

The SuRe® sustainability appraisal process is done by a third-party who brings together members of the project team to assess a project in a participatory manner. As opposed to the full SuRe® certification assessment, which would occur after construction, the appraisal takes the project team through the sustainability and resilience criteria to understand: 1. Which criteria the project already planning to comply with, and 2. In what ways can the project comply with any criteria not currently included in the project scope. The resulting assessment is based on the information provided by the project, and its commitments to future practice. In the case of the VICC™, the assessment took place during the global pandemic of COVID-19 meaning that the findings presented in this report are based on virtual assessment activities. Project developers, contractors, sustainability/technical/environmental experts and potential investors were all part of the assessment process.

The sustainability appraisal has five steps: (1) a desk review of available evidence; (2) a materiality assessment to determine the importance and impact of the 61 ESG criteria in relation to the specific context, sector and location of the project; (3) a virtual workshop comprising of several virtual calls with the whole project team and assessors to assess the material ESG criteria; (4) issuance of preliminary results and request for clarifications or additional evidence and finally; (5) the issuance of the final report to determine the likely level of compliance and certification.
The Results: Project Set for Gold

The SuRe® standard assesses project to three certification levels: Bronze, Silver and Gold. Gold being the highest level of certification which is only awarded to projects that:

- Go beyond local Industry Norms.
- Have thoroughly identified and mitigated key Environmental, Social and Governance risks.
- Do not lead to a lock-in to unsustainable development pathways.
- Implement best in class local and international practices.
- Can demonstrate significant contributions to International Sustainability Frameworks such as the Convention on Climate Change (UNFCCC), the Sendai Framework for Disaster Risk Reduction and others.
- Demonstrate benefits to society.
- Demonstrate significant innovative practices.

The SuRe® sustainability and resilience appraisal of the VICC™ found that, based on current plans and commitments of the project to future practice, the project is set to achieve a **Gold level certification**. The intended implementation of the VICC™ follows good international industry practice and is, in many cases, superior to the baseline performance levels (i.e. performance level 1) required for baseline compliance thresholds of some SuRe® performance criteria.

Therefore, the assessment team concluded that the results indicated Gold as the level of certification to be most likely achieved by the project if the project were to undergo a full SuRe® certification assessment process, post construction. The results of the assessment are considered outstanding.
Project Highlights: Areas of Outstanding Performance

The VICC™ has demonstrated above good international industry practice by considering and designing for the needs of their workers and offering discounted services and amenities for their usage, including disadvantaged groups (women, elderly and others) in their hiring, vocational and business participation plan; by planning to create more than 19,000 jobs that will support and benefit the community; by having a governance structure that considers resilience and sustainability design as a key building block of their strategy, ensuring that the project is durable, efficient and is built better from the start; and by using the space efficiently and looking at ways to re-use and recycle waste byproduct.

Specifically, the VICC™ exhibited notable areas of high performance for which it demonstrated a higher than minimum level of compliance in the following SuRe® criteria10:

- Interconnectivity, integration and lifecycle approach (Criteria G1.6 & G2.2) through transport synergies and use of adaptive design principles.
- Resilience planning and emergency response preparedness (Criteria G2.3 & G2.4).
- Gender equality (Criterion S5.3) through enabling access to new areas of work for women.
- Land-use (Criterion E5.3) through efficient footprint reduction.
- Climate change mitigation (Criterion E1.1) through significant CO2 reductions and commitment to implementing the Airport Carbon Accreditation Standard, a voluntary global carbon management standard for airports, with the ultimate objective of becoming carbon neutral.

In addition, the project has committed to the highest of three levels of compliance in the following criteria:

- S4.4 Delivery of Public Health and Safety Benefits and S5.2 Indirect and Direct Economic Development Enabled by The Project; by committing to supporting the community in providing a safer environment post development, by generating an estimated 19,150 jobs, building capacities within the surrounding community and workers, and enabling access to new areas of work for vulnerable or disadvantaged groups including women.
- E1.2 Climate change adaptation; by making commitments to demonstrate that it has been designed and built to withstand climate change impacts consistent with the predictive scenarios relevant to its location.
- E3.4 Resource efficiency; by committing to reducing the potential impacts of the materials it uses regarding global warming potential, abiotic depletion potential and toxicity potential average.
- E4.2 Water pollution; by demonstrating that it uses less water than the pre-development scenario as well as having a positive overall impact on water quality.

---

In addition, the appraisal process helped to identify several areas in which the project may further improve its positive impact. These include: mainstreaming gender equality in a systematic manner that goes beyond non-discrimination to promote empowerment; taking measures to plan and prepare for ‘low-frequency-high-consequence’ risks such as health pandemics; and ensuring preemptive design for long-term climate impacts anticipated in Los Angeles.

**Project Risks**

The appraisal found that the project had adequately identified and managed key risks associated with the project. This is expected of a project performing at ‘Gold’ level. Notable risks that the project is advised to continue to monitor include: potential negative impacts of gentrification; abiotic depletion potential; and decommissioning considerations such as recyclability of highly durable materials.

**Conclusions**

In order to better inform investment decisions that will contribute to a lasting, secure and inclusive post COVID-19 recovery, sustainability and resilience considerations are a ‘must’. Tools such as the SuRe® Standard can help project developers, financiers, public sector institutions and other stakeholders in understanding what an infrastructure project should comply with inter terms of ESG criteria, shedding light into its performance and also suggesting improvements. Building better post-COVID-19 is possible by planning, designing and investing in the right infrastructure, which is sustainable, resilient and provides positive impacts to both the society and the environment.

The VICC™ is an example of a project that not only aims at and transforms the cargo industry in terms of technology and efficiency, but rather by also positively impacting the surrounding community, the environmental impacts of the industry in general and showcasing state of the art governance structures.
Important Notices and Disclosures

This report was commissioned by and paid for by Guggenheim Partners Investment Management, LLC (“Guggenheim”). However, this report represents an independent analysis of Guggenheim and does not represent, nor should it be construed as views of Guggenheim or any of its executives, directors, or affiliates. The opinions, summaries, findings and conclusions reflect solely the views of the author. Guggenheim is a sponsor, but not an author, of this report, and Guggenheim’s participation in the report is not an endorsement or recommendation of the report or the project.

The research provided herein should not be considered as a complete analysis of every material fact regarding the topic(s) reviewed herein. Forward looking statements, estimates, opinions and certain information contained herein are subject to change without notice. Information contained herein has been obtained from sources believed to be reliable but are not assured as to accuracy. Past performance is not indicative of future results. There is neither representation nor warranty as to the current accuracy of, nor liability for, decisions based on such information.

This material is distributed or presented for informational or educational purposes only and should not be considered a recommendation of any particular security, strategy or investment product, or as investing advice of any kind. Investing involves risk, including the possible loss of principal. This material is not provided in a fiduciary capacity, may not be relied upon for or in connection with the making of investment decisions, and does not constitute a solicitation of an offer to buy or sell securities. The content contained herein is not intended to be and should not be construed as legal or tax advice and/or a legal opinion. Always consult a financial, tax and/or legal professional regarding your specific situation.

© 2020, Guggenheim Partners, LLC. No part of this article may be reproduced in any form, or referred to in any other publication, without express written permission of Guggenheim Partners, LLC, Stanford Global Projects Center, or World Wildlife Fund.