



EMPIRE STATE
REALTY TRUST

2021

SUSTAINABILITY REPORT

An aerial photograph of New York City, showing a dense urban landscape with numerous skyscrapers and buildings. The Hudson River is visible on the right, and the East River is on the left. The sky is blue with scattered white clouds. The image serves as a background for the top half of the page.

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EMPIRE STATE

REALTY TRUST

April 22, 2022

It is a pleasure and a privilege for us to share our 2021 Sustainability Report and present a year of continued achievement and commitment to our shareholders, tenants, team, and community. We have continued and expanded upon our industry leadership in sustainability, Indoor Environmental Quality (IEQ), and healthy buildings and moved strongly forward with actions to support our team and our community.

We have a comprehensive techno-economic program, aligned with the Science-Based Targets Initiative (SBTi) 1.5 °C pathway and we have developed customized plans to address each goal with targeted ROI-based initiatives. We have stated our commitment to a 2030 carbon neutrality target for the Empire State Building and a 2035 carbon neutrality target for the balance of our office portfolio.

In partnership with the New York State Energy Research and Development Authority (NYSERDA), we launched Version 2.0 of our groundbreaking energy efficiency retrofit program for the existing built environment. These case studies show a pathway and the economic case to achieve, in coordination with New York State's Climate Leadership and Community Protection Act (CLCPA), our goal of 80% operational emissions reduction by 2030. Visit this free guide for office landlords to develop their roadmap toward carbon neutrality [HERE](#).

We led the industry as the first North American commercial portfolio to receive the WELL Health-Safety rating, and we were one of the first to have our rating renewed. We piloted new IEQ technologies to position our assets to exceed leading IEQ health and wellness standards. We have made all these benefits accessible to all tenants, not just large tenants, through our IEQ Pre-Built Suites with energy efficiency at an accessible price point. Energy efficiency and health and wellness are available to all types of tenants at ESRT properties.

We have committed to diversity, equity, and inclusion within our company and supply chain through training, mobilization, and engagement. In 2022 we were included in the Bloomberg Gender Equality Index. Per the policy we implemented in 2021, every bid should include at least one bidder from an underrepresented group and every vendor must agree to ESRT's Vendor Code of Conduct. We have also invested to create better opportunities and inclusivity for diverse vendors.

ESRT has also added to the quality of our community with enhanced engagement activities at the workplace and in our volunteer work. We have served our community through park clean-ups, oyster seeding, work in soup kitchens, and more. We sponsor company-wide volunteer events throughout the year and also provide volunteer time off to encourage our people to make a difference outside of the workplace at organizations of their choosing.

In 2021 ESRT demonstrated continued leadership in a challenging time. We pushed forward on all fronts to continue to deliver value to our stakeholders and achieve our sustainability goals. There is more work to do, and we are committed to achieve.



Anthony E. Malkin
Chairman, President, and
Chief Executive Officer



Dana Robbins Schneider
SVP, Director of Energy,
Sustainability, and ESG

ESRT OVERVIEW

We advance Environmental, Social, and Governance (ESG) principles through our industry leadership, expertise, and commitment to community. We establish and execute our sustainability framework to reduce our buildings' impacts and foster health and resiliency. We do this with a focus on accountability and financial performance and care for the well-being of ESRT's people and the communities where we work and live.

Daily, we take steps to reduce the environmental impact of our portfolio, more than 10 million rentable square feet of commercial and retail space in the Greater New York metropolitan area, and have made plans for 2022 for the 625 high-rise Manhattan apartments we added to our portfolio in December 2021. We make investments and adjust our practices to achieve quantifiable improvement in energy efficiency, carbon emissions reduction, water efficiency, waste diversion, healthy buildings, and the wellness of our tenants and employees.

ESRT's leadership in energy efficiency and emissions reduction is locally, nationally, and globally recognized. We innovate, model, and implement steps to address climate change, and through our work deliver returns for, and protect, our stakeholders. This is the work on which we have based our goal to achieve carbon neutrality by 2030 at the Empire State Building and by 2035 throughout our entire portfolio.

We are a 2021 ENERGY STAR Partner of the Year, and 76% of our office and retail portfolio is certified by ENERGY STAR, the national industry standard for energy efficiency. We earned a Five Star Rating from the Global Real Estate Sustainability Benchmark (GRESB) along with the highest possible score of an A for ESG disclosure and reporting. ESRT's commitment to disclose and report progress against goals and initiatives transparently is in alignment with leading governance frameworks including GRI, SASB, and TCFD. ESRT's emissions reduction targets have been approved by SBTi as consistent with a 1.5 °C climate scenario, the most ambitious goal of the Paris Agreement.

Our commitment to the advancement of verified scientific approaches to healthy buildings and IEQ, which supports tenant well-being, has earned us the distinction of Fitwel Champion. ESRT partnered with the International WELL Building Institute and the Mayo Clinic to achieve the WELL Health-Safety Rating across 100% of our portfolio and was one of the first commercial portfolios in the Americas to achieve and be recertified for this rating. Our processes and policies support the effective implementation of these standards to ensure accountability and efficiency across our organization and ESG objectives.

We are an example of successful implementation of comprehensive, innovative, and impactful ESG policies, stakeholder engagement, and clear and actionable corporate governance. Our expertise and dedication in these areas position us to facilitate sustainable and healthy buildings within our portfolio and share best practices with our peers.

#1 MOST EFFICIENT REIT IN NYC

Based on kgCO₂e per square foot per Morgan Stanley February 5, 2020 research report (documenting 2019 data)



2021

Green Lease Gold Leader



100%

WELL Health-Safety Rated

#1 LOWEST EMISSIONS OF ALL NYC-BASED REITS

Per Green Street November 24, 2021 research reports (documenting 2020 data)



83%

Manhattan Portfolio Fitwel Certified
Fitwel Champion



SCIENCE BASED TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION
1.5°C commitment



Empire State Building is
LEED EB O&M v4 Gold



G R E S B
★★★★★ 2021

GRESB Green Star Rating
Top 20% of all GRESB Respondents
GRESB Public Disclosure A Rating

NYC MAYOR'S OFFICE OF SUSTAINABILITY NET ZERO COMMITMENT



Empire Building Challenge
PARTNER
Reimagining Low-carbon Buildings



Department of Energy (DOE)
Better Climate Challenge Partner



ENVIRONMENTAL, SOCIAL, AND GOVERNANCE STRATEGY



Integration

Sustainability is integrated into who we are and what we do in every aspect of our business. Our groundbreaking work sets the standard for our industry and delivers long-term value for our stakeholders, tenants, colleagues, and the communities where we live and work.



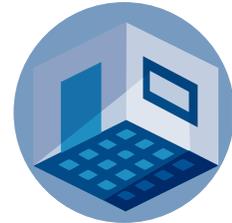
CARBON NEUTRAL BUILDINGS

Through our design standards, operational practices, and targeted decarbonization roadmap, ESRT provides an industry leading standard for decarbonizing the built environment in New York City.



HEALTHY BUILDINGS

ESRT creates spaces that support the health and wellness of our tenants and employees. We partner with tenants throughout the design process to include key design elements to enhance occupant productivity and wellness.



INDOOR ENVIRONMENTAL QUALITY

Since 2010, ESRT has deployed a leading IEQ program that includes bi-polar ionization, MERV 13 filtration, air quality monitoring, and low/no VOC materials.



RESOURCE CONSERVATION

ESRT designs and operates its buildings with environmental impact and resource conservation as a priority to ensure we operate our buildings efficiently to reduce energy, water consumption, and waste production.



COMMUNITY ENGAGEMENT

We partner with the local community through our leadership in sustainability, charitable donations, and volunteerism.





Leadership

ESRT participates in thought leadership and pilots new strategies and technologies that provide data for decisions and a blueprint for action in the real estate industry.

We measure progress against our goals consistently and holistically. We utilize an array of sensors, automation platforms, and real-time metered data. Our advanced data management facilitates understanding of consumption and performance, identifies areas of opportunity, and verifies successful measures.

We leverage our portfolio as a dynamic, living laboratory, where we pilot technologies designed to push our industry forward. We reduce the potential for future problems for our portfolio through physical and operational resilience strategies in every building, and we amplify and disseminate that knowledge in an open-source format so others can learn from our experience.

ESRT INDUSTRY PARTICIPATION



New York City Climate Mobilization Act:
LL97 Advisory Board + Commercial
Buildings Working Group Co-Chair



Real Estate Roundtable Board Member
and Sustainability Policy Advisory
Committee Chair



REBNY Sustainability
Committee



ULI Tenant Energy Optimization Program



NAREIT Real Estate Sustainability Committee



NYC Mayor's Carbon Challenge



WELL Living Lab /
Mayo Clinic Partner



Urban Green
Board of Directors



USGBC LEED
Steering Committee



The Clean Fight



EPA working groups on Energy Star
updates, underlying Commercial Building
Energy Consumption Survey and Energy
Information Agency dataset, eGRID



DOE's Better Climate
Challenge & Better
Buildings Initiative

We train our property managers, ESRT colleagues, and tenants to ensure our sustainability programs are understood and implemented across the portfolio. Our work is detailed throughout our investor materials and published online to inform investors and lenders. We maintain active engagement with federal, New York State, and New York City government, and share our work to inform policy with our successful practice. We share our work so all are aware of its potential impact on shared goals and objectives.

We align our program with global frameworks including the United Nation’s (UN) Sustainable Development Goals (SDG). The UN created the SDGs as a framework to address global challenges and create a more sustainable world. Each of our targets and initiatives are created with the SDGs in mind.





SCIENCE
BASED
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Materiality and Stakeholder Engagement

In 2021 we conducted a Materiality Assessment in alignment with TCFD and SASB standards to highlight the ESG issues most impactful to our business and stakeholders, based on their responses.

The Materiality Assessment measured ESG topics based on each stakeholder's impression of the topic's impact and importance on the organization. Stakeholders included employees, peers, investors, service providers, government and community members.

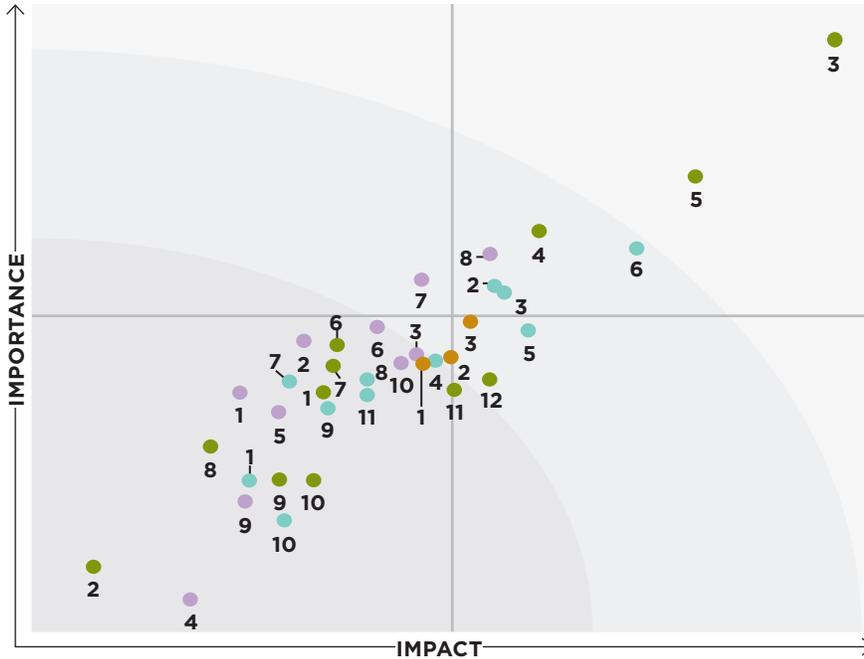
Impact refers to the effect an organization has on the economy, the environment and/or society, which can indicate its contribution (positive or negative) to sustainable development. Sustainable development meets the needs in the present without compromising the ability of future generations to meet their needs. A high impact implies that an organization's contribution (positive or negative) could or will be large.

Importance refers to the degree to which a specific metric/issue is aligned with the organization's vision and purpose, and/or the extent to which stakeholders express concern for this metric/issue. A high importance implies that a topic is integral to the organization's overall mission and operations.

SASB Standards focus on ESG issues expected to have a financially material impact on the company, aimed at serving the needs of most investors. TCFD provides a framework for climate-related disclosures to enable stakeholders to understand better the concentrations of carbon-related assets. ESRT aligned its materiality assessment with TCFD and SASB disclosure topics to ensure stakeholder expectations are addressed.

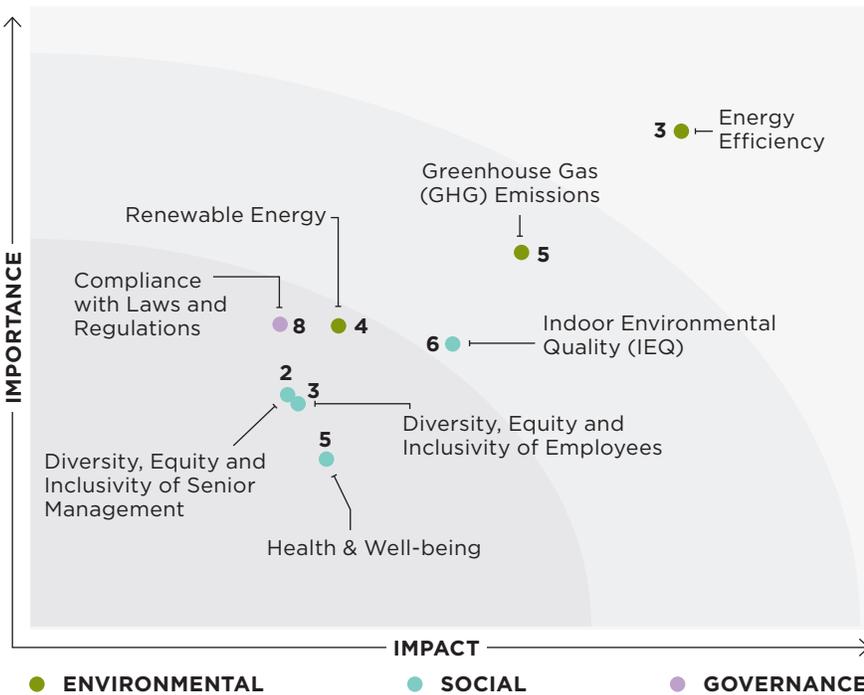


The below materiality matrix represents the complete matrix for all material topics and stakeholders.



OBSERVATIONS FROM 2021 MATERIALITY ASSESSMENT

Stakeholders identified the below eight topics as the most material topics to ESRT’s Sustainability and ESG strategy. This report details our strategy and initiatives to address each of these key points.



ENVIRONMENTAL

- 1 Alternative/Mass Transportation
- 2 Biodiversity from Property Operations
- 3 Energy Efficiency
- 4 Renewable Energy
- 5 Greenhouse Gas (GHG) Emissions
- 6 Sustainability Certifications, Ratings, and Labeling Schemes
- 7 Sustainability Certifications Specific to Health and Well-being
- 8 Pollution of Nearby Land and Water Bodies
- 9 Environmental Purchasing Practices
- 10 Waste Diversion
- 11 Waste Reduction
- 12 Water Conservation

SOCIAL

- 1 Assessing/Measuring the Impacts of Entity Operations on Local Communities
- 2 Diversity, Equity, and Inclusivity of Senior Management
- 3 Diversity, Equity, and Inclusivity of All Employees
- 4 Employee Compensation
- 5 Health & Well-being
- 6 Indoor Environmental Quality (IEQ)
- 7 Human Rights
- 8 Occupational Health & Safety
- 9 Stakeholder Engagement
- 10 Screening Suppliers and Service Providers on Environmental Criteria
- 11 Training and Education

GOVERNANCE

- 1 Anti-corruption Policies and Procedures
- 2 Anti-harassment
- 3 ESG Responsibility and Accountability Resting with the Most Senior Executive and Board
- 4 ESG Performance Impacting Employee Pay
- 5 Data Privacy and Security
- 6 Equal Pay
- 7 Business Ethics
- 8 Compliance with Laws and Regulations
- 9 Shareholder Rights
- 10 Transparency and Reporting

RESILIENCE

- 1 Climate Related Physical Risks
- 2 Climate Related Transition Risks
- 3 Emergency Preparedness

ESRT will conduct materiality assessments every three years to assess and align with shifts in circumstances and stakeholder priorities.



ENVIRONMENTAL

Buildings presently consume 70% of electricity in the United States and account for almost 40% of Greenhouse Gas (GHG) emissions. In major cities like New York City, the built environment accounts for over 70% of GHG emissions.¹ At ESRT, we believe in the power of building performance to drive global and local emissions reductions, improve employee productivity, enhance our competitive position, mitigate our stakeholders' exposure to future costs and degradation of value, and lead in environmental stewardship.

We evaluate new and emerging technologies to optimize performance across our key priority areas, and advance our efforts towards the reduction of energy, GHG emissions, water, and waste and the enhancement of IEQ. Our decarbonization and sustainability programs include consideration of embodied carbon so that we balance optimization with reuse and lifecycle assessments. Our strategy and implementation of best practices, state-of-the-art technologies, and results-driven initiatives position us to set the standard for the built environment.

Key Performance Indicators



¹ Source: NYC Mayor's Office of Climate and Environmental Justice



GOAL

ESRT Carbon Neutral by 2035

ESRT'S DEFINITION OF CARBON NEUTRALITY

Reduce building operational emissions with a renewably sourced grid aligned with New York State's CLCPA, offset residual emissions through clean energy generation and/or RECs, and report transparently, until net annual building operational carbon emissions are equal to zero.

Carbon Neutrality

The Empire State Building (ESB) targets carbon neutrality by 2030 with an 80% operational carbon reduction, achieved through the implementation of energy efficiency and emissions reduction measures, an increasingly renewables-sourced grid in compliance with New York State's CLCPA, and up to 20% offsets with off-site additive clean energy generation, Renewable Energy Credits (RECs), or other verifiable strategies.

Owners, operators, and tenants of commercial properties must work together to meet carbon reduction targets as set forth in New York City's Local Law 97 (LL97). Our work has proven that building interventions are required, along with planned major changes in power supply to the grid, to achieve NYC's and international long-term targets of 80% reduction of GHG by 2050.

The most impactful reduction by buildings is achieved through implementation of energy and emissions reduction measures at the asset level. Our groundbreaking deep energy retrofit at the Empire State Building, which began in 2010 has reduced GHG emissions by 54% from our 2009 benchmark. This version 1.0 work provided the real estate industry with a blueprint of what was then technically and economically possible in the built environment and was integrated into our entire portfolio.

ESRT has just completed and announced in April 2022 an update of its 2009 roll-out that outlines further steps on our decarbonization roadmap, referred to as 'ESRT 2.0'.

ROADMAP TO CARBON NEUTRALITY

| 2007 | 2009 | 2010 | 2012 |
|---|---|--|---|
| <p>SEP 2007</p> <ul style="list-style-type: none"> ESRT began development of 'ESB 1.0' deep energy retrofit study | <p>APR 2009</p> <ul style="list-style-type: none"> ESRT announced ESB 1.0 groundbreaking retrofit, and provided the industry with a free open protocol blueprint of what is technically and economically possible Guaranteed <ul style="list-style-type: none"> 38% energy reduction 3.1 year payback | <p>DEC 2009</p> <ul style="list-style-type: none"> ESRT established baseline for portfolio energy/GHG performance Implemented High Performance Design and Construction Standards, requiring all ESRT build out to be built to and perform at the highest level of efficiency <p>DEC 2009 - Present (Ongoing)</p> <ul style="list-style-type: none"> Submit for ENERGY STAR Certification and utilize ENERGY STAR Portfolio Manager to track performance Optimize building operations through benchmarking and tracking data, energy audits, retrocommissioning and M&V Pilot new technologies for energy efficiency and emissions reduction | <p>JAN 2010</p> <ul style="list-style-type: none"> ESRT purchased 100% wind electricity for the Empire State Building <p>JAN 2012</p> <ul style="list-style-type: none"> ESRT integrated operational best practices from ESB 1.0 into portfolio standards ESRT partnered with Urban Land Institute (ULI) to develop the Tenant Energy Optimization Program to demonstrate tenants' role in energy reduction and proven methodology for modeling and proving the business case for sustainable tenant spaces began with Natural Resources Defense Council in 2010 |



The Empire State Building has been 100% powered by renewable energy since 2010, and as of January 2021, we offset 100% of the electricity used in the portfolio through clean wind power Renewable Energy Credits (RECs). That makes ESRT the largest real estate user of 100% green power in the United States.¹ Through our partnerships with Green Mountain Energy and Direct Energy, an estimated 300 million kilowatt hours of clean energy will be sourced which we estimate will avoid more than 450 million pounds of carbon dioxide emissions.



Empire State Building reduced emissions by **54%** from baseline of 2009



46 million miles driven



Annual energy use of **2,000** homes



22,000 acres of US forests



20 million pounds of coal burned

Source: EPA Greenhouse Gas Equivalencies Calculator

| 2019 | 2021 | 2022 |
|---|---|---|
| <p>JAN 2019</p> <ul style="list-style-type: none"> ESRT formalized sustainability standard operating procedures for the portfolio <p>OCT 2019</p> <ul style="list-style-type: none"> ESRT began development of ESRT 2.0 decarbonization roadmap | <p>JAN 2021</p> <ul style="list-style-type: none"> ESRT offset 100% of the electricity used in the portfolio through clean wind power RECs <p>APR 2021</p> <ul style="list-style-type: none"> ESRT committed to carbon neutrality for ESB by 2030, and portfolio by 2035 ESB decarbonization roadmap study completed | <p>APR 2022</p> <ul style="list-style-type: none"> ESRT announced ESRT 2.0, ESB decarbonization roadmap, and releases Decarbonization Playbook in public-private partnership with NYSEDA ESRT announced community solar contract for a new 3.2MW solar project, 8.2MW battery storage system, and 80 EV charging stations at 500 Mamaroneck Avenue |

¹ Source: EPA Green Power Partnership Report

Goals and Targets

In 2021 ESRT conducted an in-depth goals and targets exercise to ensure our goals are ambitious and supported by independently verified data. We focused on six categories for our portfolio: GHG emissions, energy, water, waste, and ENERGY STAR and green building certifications. To develop and establish these goals, we used 2018 as a baseline year to ensure goals met or exceeded our existing commitments such as NYC Carbon Challenge, US Department of Energy's Better Climate Challenge and Empire Building Challenge.

We also aligned our targets with industry standards and frameworks where possible, including the United Nations Sustainable Development Goals (UN SDGs).



Science Based Targets Initiative

In 2021 we publicly committed to the Science Based Targets initiative (SBTi); a reporting framework aligned with the latest climate science guidance towards meeting the goals of the Paris Agreement. We received SBTi alignment approval in 2021 which validates through accredited global third-party experts that our targeted reduction for GHG emissions supports reduction pathways to limit global temperature rise to 1.5C. Few real estate companies have made this aggressive commitment. We intend to demonstrate these ambitious goals are technically achievable and economically advantageous in our industry.



ENERGY



Energy and Atmosphere

Ensure access to affordable, reliable, sustainable and modern energy for all

- Target a reduction of energy use intensity by 20% by 2024 as part of the U.S. Department of Energy's Better Buildings Challenge
- ESRT offsets 100% of the electricity used in the portfolio through clean wind power RECS
- Nation's largest 100% user of green power in real estate per EPA Green Power Partnership report given that 100% of our portfolio is covered by renewables
- #1 most efficient REIT in NYC based on kgCO₂e per square foot per Green Street November 24, 2021 Report (documenting 2020 data)

GOAL*:

50%
site energy
reduction by 2035

**2021 PROGRESS:
ON TARGET**

**ENERGY USE INTENSITY
(kBtu/ft²)**

| | |
|------|----|
| 2021 | 58 |
| 2020 | 57 |
| 2019 | 66 |



GHG EMISSIONS



Climate Action

Take urgent action to combat climate change and its impacts

- Target net-zero carbon emissions by 2030 at the Empire State Building and across our portfolio by 2035
- Work to identify pathways to exceed NYC goals to reduce GHG emissions 40% by 2030 and 80% by 2050
- Intend to meet the Empire Building Challenge and commit to leadership at a statewide level to achieve 85% local emissions reduction by 2035 in partnership with the grid

GOAL*:

Carbon Neutrality
by 2030 for Empire State Building, and by 2035 for the office portfolio

**2021 PROGRESS:
ON TARGET**

**GREENHOUSE GAS EMISSIONS INTENSITY
(kgCO₂e/ft²)**

| | |
|------|------|
| 2021 | 4.77 |
| 2020 | 4.21 |
| 2019 | 5.18 |

* All goals and targets represent like-for-like comparisons for assets owned for 24 consecutive months across the current and previous reporting year. 2020 and 2021 energy use outcomes were impacted by low building utilization rates during the COVID-19 pandemic, and thus are not representative of consumption at full occupancy.

WATER CONSUMPTION



Clean Water and Sanitization

Ensure availability and sustainable management of water and sanitation for all

- Target reduction of water use 2% year-over-year
- Target 30% reduction by 2035 from a 2018 baseline
- Implement ultra-low-flow touchless fixtures in all renovations
- Phase in real-time water metering software across the portfolio between 2020 and 2025

GOAL*:

30%

reduction in water intensity by 2035

2021 PROGRESS: ON TARGET

WATER (m³)

| | |
|------|---------|
| 2021 | 297,834 |
| 2020 | 318,388 |
| 2019 | 581,193 |

WASTE



Responsible Consumption and Production

Ensure sustainable consumption and production patterns

- Target a reduction of waste generation 5% year-over-year
- Target 75% waste diversion rate by 2035 from a 2018 baseline
- Perform waste audits at 100% of properties annually (note: this could not be effectively done in 2020 due to pandemic precautions and impact on waste diversion measures)

GOAL*:

75%

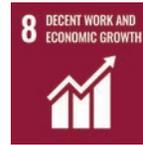
waste diversion rate by 2030

2021 PROGRESS: ON TARGET

WATER DIVERSION

| | |
|------|-----|
| 2021 | 36% |
| 2020 | 35% |
| 2019 | 22% |

CERTIFICATIONS



Good Health and Well-being

Decent Work and Economic Growth

- Ensure healthy lives and promote well-being for all at all ages
- Promote inclusive and sustainable economic growth, full and productive employment and decent work for all

- Pursue ENERGY STAR Certification at 100% of eligible buildings
- Report to GRESB annually
- Align reporting with TCFD, SASB, and GRI as feasible
- Perform third-party data verification in alignment with ISO 14064-3
- Maintain WELL Health-Safety Rating annually
- Environmental Management System aligned with ISO 14001 adopted in 2020
- Climate Change Adaptation and Resilience plan intended to align with TCFD

GOAL*:

100%

of eligible buildings are green-certified across LEED, Fitwel, and WELL Health-Safety rating by 2025

✓ Achieved goal for green building certifications

GOAL*:

75%

of eligible buildings are ENERGY STAR-certified by 2025

✓ Exceeded goal for achieving ENERGY STAR certifications

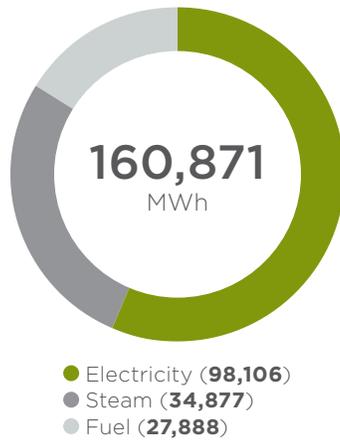
* All goals and targets represent like-for-like comparisons for assets owned for 24 consecutive months across the current and previous reporting year. 2020 and 2021 water usage and waste diversion outcomes were impacted by low building utilization rates during the COVID-19 pandemic, and thus are not representative of consumption or waste generation at full occupancy.

Empire State Realty Trust commits to disclose key environmental performance metrics across energy, GHG emissions, water, and waste to track, evaluate, and improve performance.

We disclose environmental performance data for properties where Empire State Realty Trust has full operational control and authority to implement operational policies related to energy, GHG emissions, water, and waste. The reporting boundary includes 14 properties wholly owned and controlled by Empire State Realty Trust as of December 31, 2021. GHG Emissions were calculated in accordance with the WRI GHG Protocol and verification of the data contained herein was conducted in accordance with ISO 14064 Part 3. A similar approach and methodology was utilized for energy, water, and waste data.

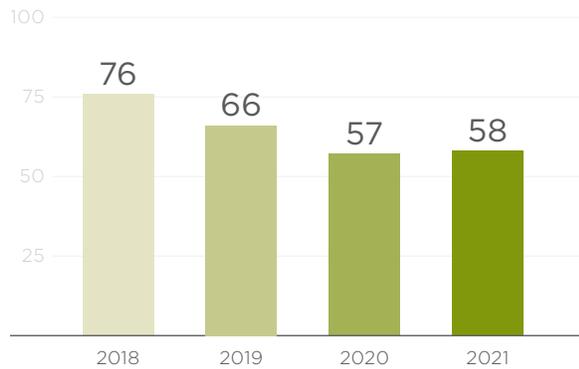
ENVIRONMENTAL PERFORMANCE

2021 ENERGY CONSUMPTION DISTRIBUTION* (MWh)



↑ 13%
reduction in energy consumption compared to 2020

LIKE-FOR-LIKE ENERGY USE INTENSITY* (kBtu/ft²)

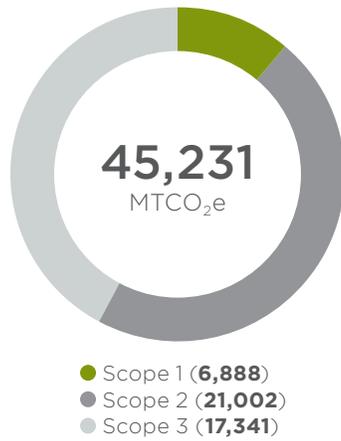


100%
of portfolio electricity has been offset through the purchase of Green E Certified Wind Power Renewable Energy Credits

* Energy usage is calculated on a like-for-like basis each year. 2020 and 2021 energy use outcomes were impacted by low building utilization rates during the COVID-19 pandemic, and thus are not representative of consumption at full occupancy.

GREENHOUSE GAS EMISSIONS PERFORMANCE

2021 GREENHOUSE GAS EMISSIONS*
(MTCO₂e)



↑ **13%**
reduction in emissions compared to 2020

LIKE-FOR-LIKE GREENHOUSE GAS EMISSIONS*
(MTCO₂e)

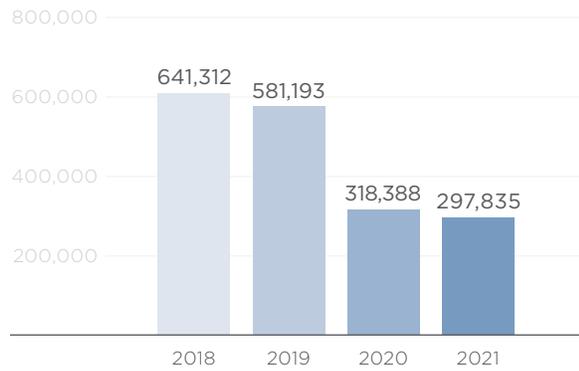


* GHG emissions are calculated on a like-for-like basis each year. 2020 and 2021 emissions outcomes were impacted by low building utilization rates during the COVID-19 pandemic, and thus are not representative of consumption at full occupancy.

WATER PERFORMANCE

2021 WATER CONSUMPTION*

(m³)



6%
reduction in water consumption
compared to 2020

LIKE-FOR-LIKE WATER USE INTENSITY*

(kgal/ft)

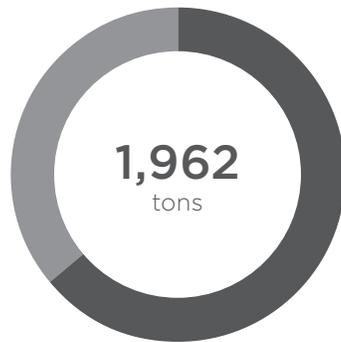


0.12 kgal/ft²
2021 water use intensity

* Water usage is calculated on a like-for-like basis each year. 2020 and 2021 water usage outcomes were impacted by low building utilization rates during the COVID-19 pandemic, and thus are not representative of consumption at full occupancy.

WASTE PERFORMANCE

2021 WASTE PERFORMANCE* (tons)



- Landfill (64%)
- Recycling (36%)

36%
waste diversion rate in 2021



We recycle tenant waste and construction debris throughout our entire portfolio. Our goal is to increase recycling diversion rates and the types of materials recycled, both in daily waste and in renovation and new construction.

* Waste generation is calculated on a like-for-like basis each year. 2020 and 2021 waste generation outcomes were impacted by low building utilization rates during the COVID-19 pandemic, and thus are not representative of consumption at full occupancy.



Sustainability Guidelines & Policies

Our initiatives and associated processes set forth our steps to meet our sustainability commitments. We have developed Sustainability Guidelines, High-Performance Sustainable Healthy Design and Construction Guidelines for tenant fit-outs and a Vendor Code of Conduct to ensure that property purchased goods and services are held to the highest standard of ethics and sustainability performance.

We utilize our comprehensive approach to sustainability and ESG whenever we evaluate potential acquisitions. We aim to implement our program of decarbonization goals, healthy spaces to live and work, and the highest standards of IEQ for our tenants, water safety and conservation, and diversion of waste from landfill on completed acquisitions.

Our Sustainability Guidelines and Policies provide requirements and recommendations for the following:

- Environmental Management System aligned with ISO 14001
- Energy and GHG Emissions Management
- Water Management
- Waste Management
- Vendor Code of Conduct
- Climate Change Adaptation & Resilience
- Indoor Environmental Quality (IEQ)
 - Indoor Air Quality (IAQ) Monitoring
 - Tobacco-free and Smoke-free Environment
 - Low-VOC Emitting Materials
 - Green Cleaning
 - Integrated Pest Management (IPM)
- Sustainable Procurement

DATA-DRIVEN PERFORMANCE

ESRT measures, manages, and evaluates performance against our goals. We use data management platforms and technologies to provide advanced analytics and insights to inform and improve our performance. We partner with a leading energy analysis firm to review energy supply, demand, budgets, and pricing to plan accordingly for energy supply and current and future renewable sources.

We leverage industry-recognized frameworks and standards including GRESB, SASB, TCFD, SBTi, and GRI to inform our strategy and evaluate progress against our goals. Annually, we calculate GHG emissions in alignment with the GHG Protocol. To ensure accuracy and transparency in reporting, third-party verification is performed in alignment with the ISO 14064-3 standard and we utilize the following data management platforms:

- **Software** platform that produces key insights and analytics of Building Management System (BMS) data to provide Real Time Energy Management (RTEM) analytics.
- **Platform** for automated, interval level meter data and tenant billing capabilities.
- **ENERGY STAR Portfolio Manager** tracks all energy and water consumption across the portfolio.
- **Real-Time Metering** tracks real-time energy consumption.
- **Demand Response** with real time peak load management and demand response program has been in place for over a decade.

For a full listing of our partners and vendors, please see page 58 of this report



ENVIRONMENTAL MANAGEMENT SYSTEM

We use an Environmental Management System (EMS) to formalize our sustainability strategy. The EMS is based on the ISO 14001: 2015 international standard.



- 1 PLAN**
- Establish goals and targets
 - Develop sustainability guidelines (standard operations procedures)

- 2 DO**
- Identify roles and responsibilities
 - Educate and engage employees and tenants
 - Implement innovative technology
 - Undertake projects

- 3 CHECK**
- Track and monitor performance - real time energy management, benchmark in ENERGY STAR Portfolio Manager
 - Conduct energy, waste, and water audits
 - Implement efficiency measures

- 4 ACT**
- Evaluate performance
 - Continuous improvement
 - Annual sustainability program review
 - Report - GRESB, Annual Sustainability Report
 - ENERGY STAR Partner of the Year, 76% ENERGY STAR certified, 100% WELL Health Safety Rating

ESRT purchases wind power to provide

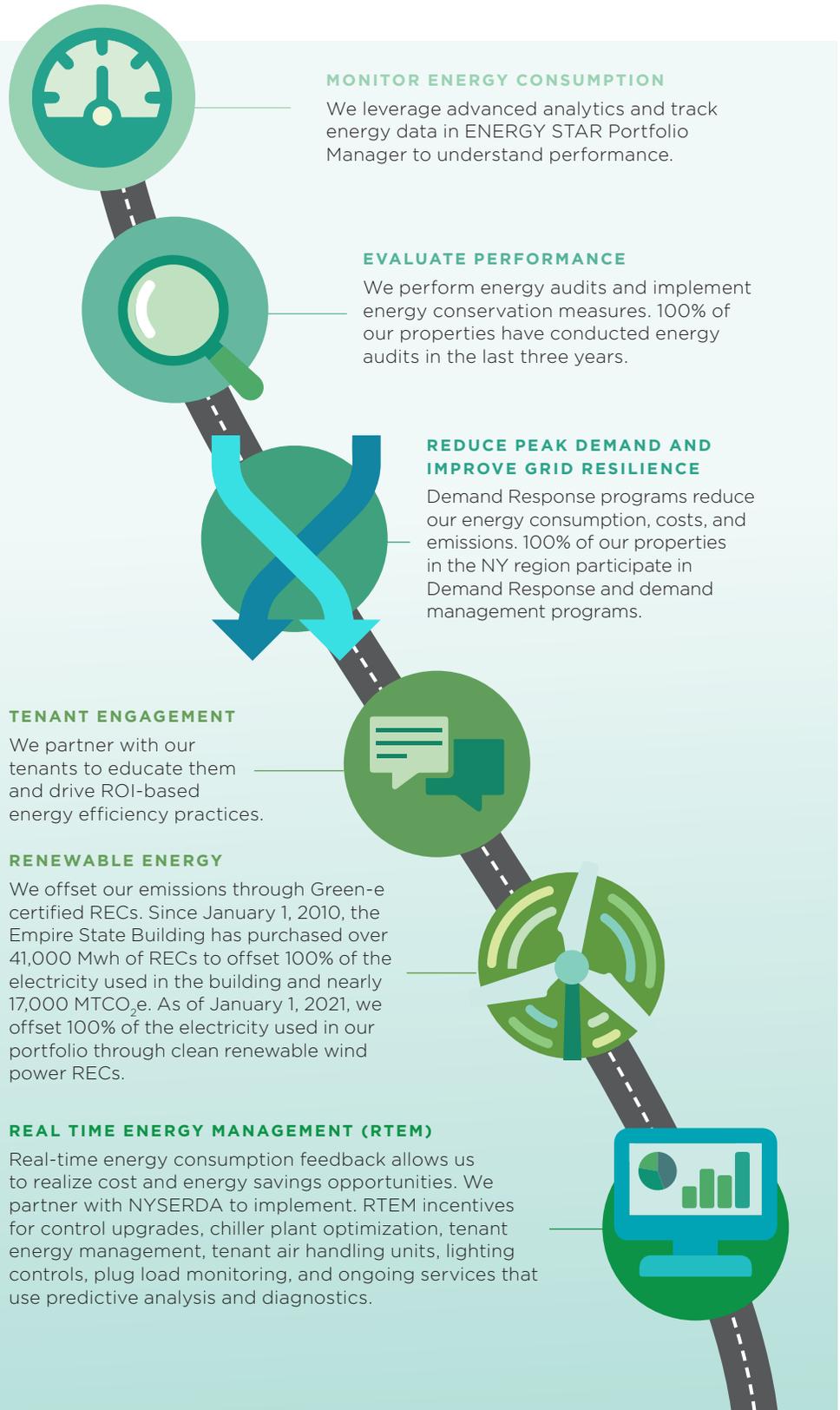
100%

renewable electricity to the portfolio.



ENERGY

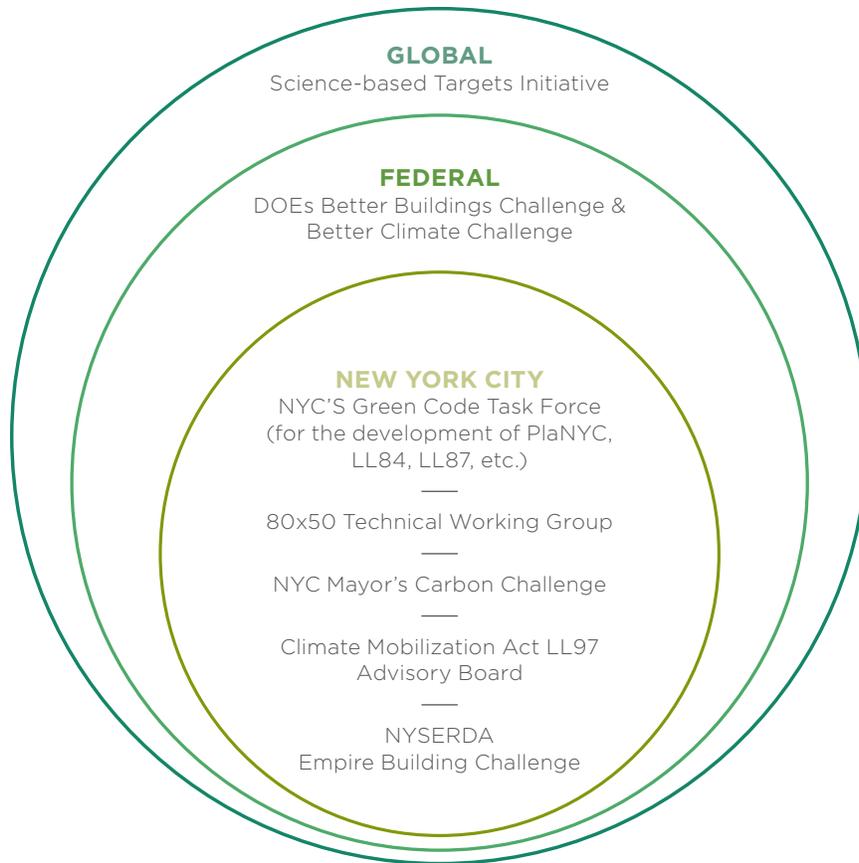
We focus our efforts on ROI-driven energy efficiency strategies, cutting-edge technology, and advanced analytics to achieve portfolio-wide quantifiable performance improvements. Our holistic energy efficiency approach is as follows:



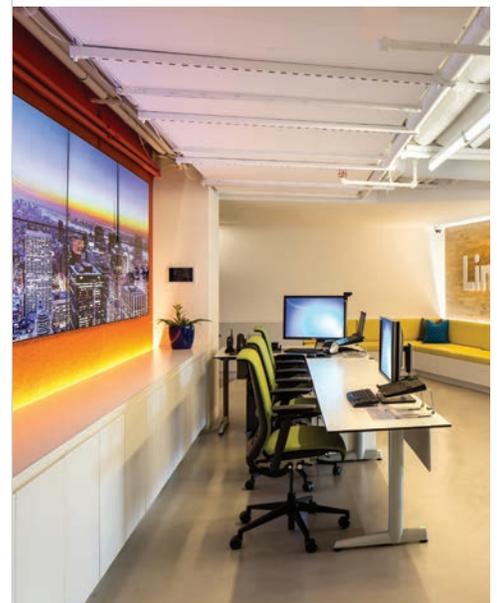
We perform energy audits on a regular basis (at a minimum every 3 years), procure RECs to offset emissions from electricity consumption, and partner with policymakers to drive a renewable and resilient grid. Our plan to accomplish our 2035 carbon neutrality target is to continue to implement these measures, perform evaluations of emerging technologies, and scope opportunities for on-site or community-based renewable energy and storage where viable.

Our Chairman, President and CEO is the Chair of the Real Estate Roundtable’s Sustainability Policy Advisory Committee that focuses on federal legislation and engagement with commissions, departments, and agencies on the federal level.

We have promoted energy efficiency throughout our portfolio since 2007 when New York City began its climate leadership under Mayor Bloomberg. ESRT’s participation included work on programs such as:



We implement Real-Time Energy Monitoring, conduct Measurement and Verification (M&V) audits and Tenant Engagement Management analytics, and perform quarterly M&V on energy projects. We partner with ConEdison and New York Independent System Operator (NYISO) on over 8 million square feet of our portfolio in their Demand Response (DR). With DR, we reduce our assets’ electricity usage through peak periods, reduce stress on the grid, and help prevent disruptions to service such as, brown outs and blackouts. All assets have access to a Real-Time meter data (RTM) tool designed for proactive demand management during demand response events.



We implement water efficiency strategies to support our water reduction goals and minimize our impact on the environment. Our water efficiency initiatives include a combination of retrofits, submeters, and pilot technology.



Low-flow retrofits/upgrades

As part of our standards, we continue to implement ultra-low-flow fixtures that we estimate to be 40–50% better than Code and are EPA WaterSense labeled.



Water submeters

To monitor and measure water consumption by end use and identify areas for targeted reduction, we install water submeters for key water-using systems. We track progress from water efficiency upgrades, identify leaks from specific systems, and readily identify opportunities to increase water efficiency.



Advanced software-based water use monitoring

We have implemented an artificial intelligence software to detect and stop water leaks in select spaces, monitor water use, and analyze water use trends. This technology enables our property managers and engineers to expertly manage water consumption and make informed operational decisions in real time. As of December 31, 2021, 30% of our portfolio has implemented this smart technology. We plan to extend implementation of this technology across our entire portfolio to further reduce process water usage over the next year.



WATER

The reduction of water consumption in buildings reduces overall environmental impact, drives operational cost savings, and contributes to the reduction of risk from fluctuations in water supply. Water usage reduction and water runoff quality and quantity management are critical issues. We address each of these through water processing, water fixtures, green roofs, and native xeriscape planting (where applicable).

To implement our water policy and implement conservation initiatives we partner with our property managers and building engineers to understand the factors that influence asset water usage through collection of readily available information and inventory of all water fixtures, equipment, and systems and provide guidance on the following:

- Set and track towards performance goals
- Keep water data updated in ENERGY STAR Portfolio Manager
- Fix identified leaks
- Install or retrofit existing fixtures for ultra-low-flow models where possible
- Ensure best practices for water conservation
- Engage and educate tenants on opportunities for specifications and behaviors to drive water efficiency
- Continue to research, pilot, and implement strategic water management technologies and strategies in base building and tenant spaces

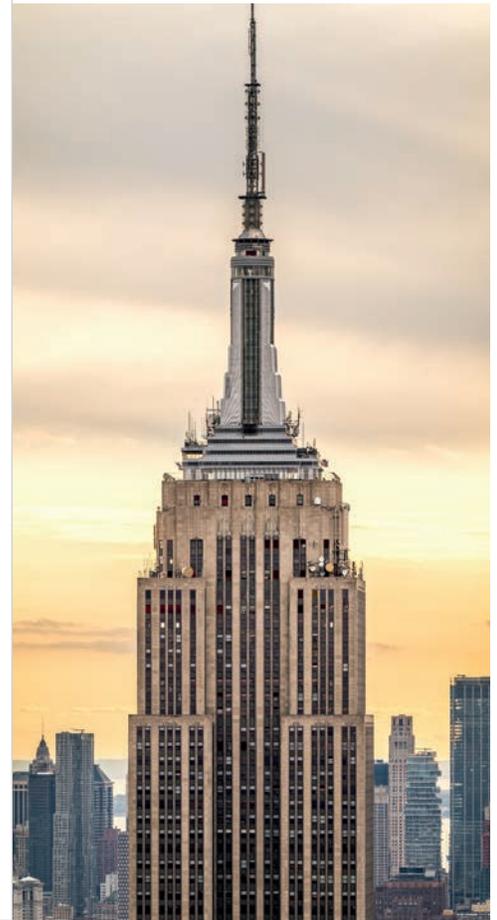
WASTE

We commit to minimize waste generated at our properties through waste reduction, recycling, composting, donation, and other initiatives to divert waste from landfills. Our Sustainable Waste Management Policy outlines the necessary steps for implementation, with responsibilities delegated to our property managers, project managers, custodial staff, tenants, and any third-party waste vendors to improve waste diversion.

We place clearly labeled accessible bins for trash, paper, and combined plastic, metal, and glass recycling at all of our assets and loading docks and comply with applicable local Codes and regulations. The installation of waste decals from the Business Integrity Commission (BIC) at our New York City properties provides an opportunity for us to identify single stream or separated recycling to assist building occupants and maintenance. We provide an array of education and engagement programs for our tenants on topics which include recycling, composting, donation programs, and special diversion of regulated waste such as lamps, batteries, and electronic waste.

We deploy proactive practical waste diversion strategies that meet or exceed local regulations. We provide training and set best practices and standards for our employees and outside contractor teams to reduce overall waste generation and increase diversion rates. We identify opportunities to track and report waste at each property to ensure that all waste is being collected and diverted in accordance with ESRT's guidelines.

- We commit to perform waste audits at 100% of our buildings to understand waste performance and identify opportunities for improvement.
- Waste audits were not completed in 2020 due to low occupancy. Waste audits were completed at each building in 2021 when occupancy reached levels sufficient for impactful results.
- We have implemented pilot compost programs with some of our largest tenants and offer furniture reuse and donation programs, and electronic waste collection opportunities.



WASTE INITIATIVES

ANNUAL WASTE AUDITS

ESRT partners with Great Forest to annually complete Waste Audits to verify and understand the waste performance at our buildings, identify opportunities to increase diversion rates.

TENANT ENGAGEMENT AND EDUCATION

ESRT provides education on waste management and recycling practices to ensure our tenants are equipped with the knowledge to reduce waste.



MONTHLY WASTE DATA AND DIVERSION RATES

At year end ESRT provides tenants with monthly waste data and diversion rates.

TENANT PILOT COMPOST PROGRAMS

ESRT partners with tenants to deploy composting programs to reduce the amount of food waste.

BUILDING STAFF ENGAGEMENT

ESRT building staff annually receives training on proper waste management to ensure waste/recycling is handled correctly from start to finish.

High-Performance Healthy Buildings

ESRT is committed to provide tenants with healthy work environments focused on the health and wellness of the people who occupy our buildings every day. Healthy buildings where we can work together and collaborate help to restore company culture after widespread office closures, increase productivity, and drive the bottom line. ESRT developed a program of strategies rolled out across the portfolio, in alignment with the Fitwel Certification (83% of NYC portfolio certified), WELL-Health Safety Rating (100% of portfolio certified) and industry-leading best practice. These strategies are illustrated in the figure to the right.

INDOOR ENVIRONMENTAL QUALITY (IEQ)

For more than a decade, improving IEQ has been a key tenet of our sustainability strategy. Our industry-leading, comprehensive, and state-of-the-art program focuses on operational best practices to ensure healthy and productive spaces, including MERV 13 filters, bipolar ionization air purification technology, indoor air quality (IAQ) testing, CO₂ sensors, green cleaning practices, integrated pest management strategies, and low-emitting materials.

In 2020, ESRT was the first commercial real estate portfolio in the Americas to achieve the WELL Health-Safety Rating across 100% of its portfolio and one of the first to recertify. The WELL Health-Safety Rating, developed by the International WELL Building Institute, is an evidence based, third-party rating focused on operational policies, maintenance protocols, emergency plans, and stakeholder education to address a post-COVID-19 environment and broader health and safety-related issues in the future. When faced with the most intense pandemic in over a century, ESRT developed a pathway for our employees, visitors, and tenants to return to the office with confidence.

We are partners with the WELL Living Lab and Mayo Clinic to advance the study of the indoor environment's impact on human health and to help develop practices that can be implemented across the country. ESRT is part of the WELL Living Lab Alliance, a global consortium of organizations that support the advancement of knowledge of IEQ to improve human health and well-being. Our engagement in this effort will extend the WELL Living Lab's pioneering research at the intersection of health, building, and behavioral sciences.

Through our partnership with Delos and WELL Living Lab, a company dedicated to the scientific research, evaluation, and solutions surrounding IEQ impacts on building occupants' health and well-being, we help the industry provide guidance that our tenants can depend on to promote functional, energy-efficient, and human health-enhancing spaces. We continue to monitor and track performance as science, data, and knowledge evolve.



Our portfolio is **100% WELL Health-Safety Rated** and **83%** of our NYC portfolio is **Fitwel certified.**

HEALTHY BUILDING MEASURES

HUMAN EXPERIENCE

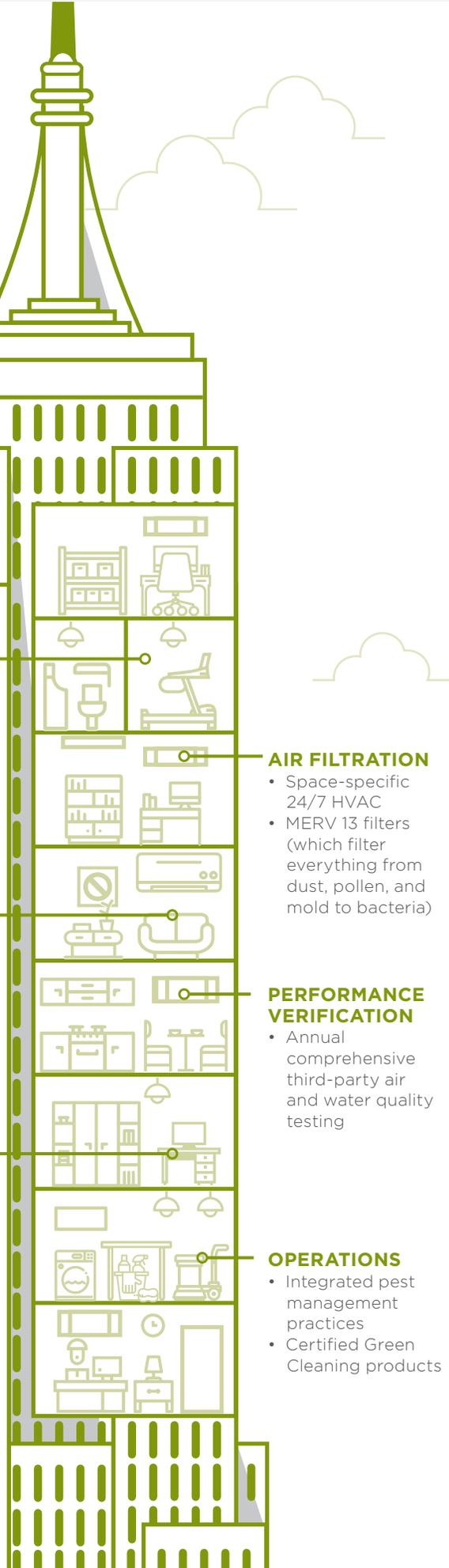
- CO₂-based Demand Control Ventilation to ensure adequate introduction of fresh outside air for ventilation
- Advanced LutronVive lighting control system to optimize daylight, glare and productivity balanced with energy efficiency

AIR PURIFICATION

- Active bi-polar ionization air purification system to improve air quality

HEALTHY MATERIALS/ PRODUCTS

- Sustainable purchasing, such as low or no VOC and no Red List materials in tandem with our High-Performance Sustainable Healthy Design and Construction Guidelines



AIR FILTRATION

- Space-specific 24/7 HVAC
- MERV 13 filters (which filter everything from dust, pollen, and mold to bacteria)

PERFORMANCE VERIFICATION

- Annual comprehensive third-party air and water quality testing

OPERATIONS

- Integrated pest management practices
- Certified Green Cleaning products

In alignment with our approach to evaluate strategically and leverage innovative technologies, ESRT continually tests, vets, and implements IEQ strategies and technology across our portfolio. Bipolar ionization air purification is installed in over one million square feet of office space across our portfolio. This technology syncs both with the ionization technologies and with a building’s IT infrastructure, providing encrypted data, notifications, and reports through self-calibrating sensors that monitor for chemical and biological contaminants.

IEQ During Construction at ESRT

Design and construction of new spaces and renovations represent significant opportunities to drive energy efficiency, sustainability, and healthy productive IEQ. ESRT has implemented rigorous standards for sustainability and IEQ during construction of base building and tenant projects, outlined in our High Performance Sustainable Healthy Design and Construction Guidelines and supporting SOPs. These include:



Construction Indoor Air Quality Management Plan

- In alignment with Sheet Metal and Air Conditioning National Contractors Association (SMACNA) recommendations



HVAC equipment and pressurization protection

- Limit use of ventilation system during construction
- Replacement of filtration media prior to occupancy if HVAC is operated during construction, with no less than MERV 13 filters



Source Control

- Use of low- or no-VOC products
- Prohibit use of gasoline or diesel equipment
- Prohibit smoking and vaping
- Protect absorptive materials from moisture damage



Pathway Interruption

- Ensure walk off mats are installed as appropriate



Housekeeping

- Institute cleaning activities concentrating on HVAC equipment and building equipment to remove contaminants prior to occupancy
- Green cleaning and pollution mitigation practices



Monitoring

- Adherence with IEQ plan will be documented by general contractor through weekly reports and on-site inspections



Flush out and or testing

- If all measures have been consistently adhered to and documented, a flush-out or air testing will occur at owner’s discretion, otherwise a flush-out or air testing is required prior to occupancy.



Tenant Engagement

Our tenants play an essential role in our sustainability program, policy implementation, asset performance, and sustainability strategies across our portfolio. Tenants' energy and water use, waste production, and related behaviors significantly impact overall building performance and achievement of our sustainability goals. From 2020 through 2021 the market has seen an increased focus on ESG, with intensive and detailed questions on strategy, initiatives, and goals. We proactively engage with our tenants to align our ESG goals and provide them with support to measure, report, and achieve their ESG targets. ESRT provides tenants with ESG data, actionable recommendations for reduction, ROI-based design and construction energy efficiency support, and an active landlord partnership in their sustainability journey.

PROGRAM OVERVIEW

At ESRT, our partnership with our tenants extends beyond traditional engagement. At each stage of the relationship, we engage with tenants to integrate priorities and customize initiatives which support their sustainability and ESG goals, while driving building performance.

Our engagement with tenants begins with the integration of a suite of sustainability provisions in all our leases. Our lease requirements encourage collaboration to achieve efficiency, including performance-based criteria for energy, water, health, IEQ, responsible materials specifications, and waste diversion. We share energy, water, waste, and IEQ data with our tenants, and provide hands-on expertise for sustainability performance.

GREEN LEASING

Our leasing team communicates the unique sustainability features included in our state-of-the-art pre-built spaces to effectively integrate best practice, efficiency and IEQ measures with modern design elements. ESRT's leases are structured to include green lease clauses, which support our repeated achievement of Green Lease Leader Gold recognition. Green leases include criteria for transparent tracking and reporting of energy, water, waste, and emissions data, broker training, submetering, and tenant fit-out requirements.

DESIGN AND CONSTRUCTION

For all tenants we complete reviews of architectural and mechanical drawings to ensure compliance with lease requirements and to align with High Performance Sustainable Healthy Design and Construction Guidelines. The guidelines include energy efficient strategies as well as IEQ strategies, which have resulted in 20-57% modeled energy savings, with a payback period of 1.8-4.6 years. Our continuous assessment and reevaluation of the combination of strategies we implement at each asset results in improved satisfaction and well-being for our tenants, a strong ROI for our investors, and purposeful, rewarding work for our employees.



Achieved Green Lease Leader Gold recognition in 2020 and 2021 (the highest level possible) for our dedication to sustainability for the whole building with a focus on performance of tenant space and execution of green leases across 100% of the portfolio

OPERATIONS AND ENGAGEMENT

Tenants of ESRT can expect continuous engagement around sustainability and ESG over the term of the lease, with various events and education opportunities, as well as additional support on custom Tenant Energy Efficiency programs (see detail below). From an operational perspective, ESRT building services align with sustainability best practices, from Green Cleaning and Integrated Pest Management to tenant sustainability walkthroughs. We complete tenant sustainability walkthroughs upon request to evaluate existing tenant spaces for sustainability and ESG opportunities. In addition, ESG data is provided to tenants upon request on a quarterly basis.

We provide tenants with Sustainability Guidelines and factsheets and maintain frequent, consistent communications through email, in-person meetings, and social media. Educational sessions through Town Halls and individual custom tenant groups are available to all building occupants with our Senior Vice President and Director of Energy, Sustainability, and ESG across all aspects of our holistic sustainability and ESG program.

The landlord-tenant partnership is key to the success of our sustainability and ESG program and achievement of our carbon neutrality goals. We look forward to continuing to strengthen this partnership with all tenants as we work towards a green future.

TENANT ENERGY EFFICIENCY PROGRAMS

We partner with tenants to monitor and evaluate our portfolio-wide energy consumption and GHG emissions reductions, water reduction, and the measures we implement to make continuous progress against our intensive long-term goals. We developed our High Performance Sustainable Healthy Design and Construction Guidelines that include strict requirements to drive building performance throughout the design, construction, commissioning, and occupancy phases and to optimize energy efficiency and sustainability in tenant spaces. We provide information on the following energy efficiency programs for tenant participation:

- **NYSDERDA Commercial Tenant Program (CTP):** Provides financial support for engaging qualified consultants to perform energy audits that identify energy saving opportunities and create plans for the implementation of energy efficiency measures in tenant spaces. Tenants can engage with consultants at any phase of the lease to identify opportunities to reduce energy costs and areas of improvement for occupant wellness and comfort.
- **ENERGY STAR for Tenant Spaces:** A program that demonstrates tenants' commitment to energy efficiency through estimating energy use, metering energy use, using efficient lighting, using efficient equipment and sharing data. Through his role as Chairman of the Real Estate Roundtable's Sustainability Policy Advisory Committee, our Chairman, President and CEO initiated the federal legislation that enabled the ENERGY STAR program to expand to this specific certification for tenants.
- **ULI Tenant Energy Optimization Program:** A program that integrates energy efficiency into tenant space design and construction and delivers financial returns through energy conservation. Our Chairman, President and CEO arranged the private funding and creation of this program at the Natural Resources Defense Council and arranged for the transfer of the program to the Urban Land Institute.



ULI Tenant Energy Optimization Program

Over 930,000 square feet of ESRT's tenant space is LEED ID+C (Interior Design and Construction) Certified





ESRT Version 2.0

INTRODUCTION

Since March 2020, we have led a public private partnership with NYSERDA and three other NYC-based property owners to develop a playbook that outlines the step-by-step process for existing commercial buildings to provide a pathway to carbon neutrality with proven returns on investment. We call this work that builds off our groundbreaking work first made public in April 2009, ESRT Version 2.0.

New York State and New York City have passed legislation which commits the grid and the built environment to a carbon neutral future. In response to this legislation, we proactively identified the need to understand the business case and possible technical pathways to decarbonize our portfolio in alignment with LL97, CLCPA, SBTi and our decarbonization goals.

Each step is illustrated by real examples and live tools from the Empire State Building 2.0 team's work.

VERSION 2.0 PLAYBOOK

The playbook announced in April 2022 marks a crucial pathway forward for owners to make their buildings compliant with the emissions caps established in NYC's LL97 and a decarbonized future based on global Science Based Targets.

A resource for building owners and operators, their brokers and design and engineering teams, who want to capture the economic benefits of energy efficiency and to decarbonize the operations of their buildings, the playbook allows real estate professionals to learn from the expertise of an industry-leading expert team.

A long-term building decarbonization plan plots a course to cost-effective carbon reduction.

- Gather a team of experts, establish a baseline and goals;
- Develop a calibrated model to assess the impact of projected efficiency and emissions reduction;
- Thoroughly investigate the technical potential for energy and carbon reduction;
- Perform a financial assessment of individual and groups ("packages") of energy and emissions conservation measures (ECMs) in the context of an evolving thermal and electric grid; and integrate projected energy and maintenance savings, avoided fines and risk (such as LL97 fines), incentives, and refined capital and implementation costs.

We have completed this analysis in the majority of our properties including the Empire State Building, and in 2022 we will finish the balance. The playbook is accessible as freeware to support the real estate sector's transition to a decarbonized future. The playbook can be accessed at nyserdera.ny.gov/ebcplaybook.

VERSION 2.0 TEAM

| | | | |
|---|--|---|--|
|  <p>Engineering and technical lead for the development and implementation of the 2.0 work. As a global leader in whole building systems engineering and decarbonization, they led analysis, design, innovation, technical knowledge management, and reporting.</p> |  <p>Energy modeling lead, iterative and integrated analysis of potential impact of emissions and energy conservation measures on whole building system performance, potential utility, and financial savings.</p> |  <p>Provided cost estimates and constructability expertise for energy and emissions conservation measures as well as partnering for evaluation of technology pilots in their space to ensure accurate representation in models and decision-making.</p> |  <p>Provided expertise on current and potential future grid scenarios, projecting trends, utility rates, tariffs, and projected performance instrumental in modeling the static, projected, and CLCPA grid scenarios, to demonstrate the vital role the grid and building owners play in decarbonization.</p> |
|  <p>Empire Building Challenge and RTEM+ incentives and support for the innovation and analysis of potential decarbonization strategies. NYSEKDA convenes suppliers and experts and will partner with us to amplify the replicable roadmap developed by this team.</p> |  <p>World class wireless Building Management System, advanced controls development, and performance optimization support as well as advanced development of FDD and analytics.</p> |  <p>Expert guidance on program architecture, outcomes, amplification, and innovative solutions for decarbonization. Stephen's role as RMI lead on the 1.0 work provided expertise to challenge the status quo.</p> |  <p>Reos Partners assisted with process design, management and facilitation of workshops.</p> |

VERSION 2.0 WORKSTREAM

- 1**

Evaluate the technical and economic potential to achieve carbon neutrality
- 2**

Define technical and economic needs to meet and exceed state and city targets and plans for 2024, 2030, 2035 and 2050

 - LL97 sets emissions reductions caps for the above years
- 3**

Conduct a thorough technology review via pilots, building tests, energy modeling, site visits and vendor evaluations
- 4**

Evaluate the effects of changes to the grid
- 5**

Analyze whole system approach based on energy models, economic assessment and supply side opportunities
- 6**

Utilize private know-how, leadership and public funding
- 7**

Utilize multi-stakeholder engagement which thoroughly explores the role of tenants to meet targets
- 8**

Identify the achievable results based upon a five-year payback on investment

ESRT's working definition for carbon neutral existing buildings is that, by drastically reducing building operational emissions in partnership with a renewably sourced grid aligned with CLCPA, and offsetting residual emissions through clean energy generation and/or RECs, through a transparent accounting and reporting process, net annual building operational carbon emissions are equal to zero.

By 2030, the Empire State Building will target carbon neutrality through an 80% operational carbon reduction, achieved through a combination of energy efficiency measures, a more renewably sourced grid, and a 20% offset with off-site clean energy generation and RECs.

Our results are presented in five distinct packages with varying impacts on emissions and financial cases. Each package includes a specific set of incremental energy and emissions conservation measures to be implemented over a 10-15 year period in a building.

Embodied carbon is key to our analysis. As defined by McKinsey & Company, embodied carbon consists of all the GHG emissions associated with building construction, including those that arise from extracting, transporting, manufacturing, and installing building materials on site, as well as the operational and end-of-life emissions associated with those materials. Equipment is reused, retrofitted, and retro-commissioned until the end of its useful life whereupon it will be replaced with the most efficient system to deliver optimal techno-economic balance between emissions reduction and IRR. Measures will also be phased to avoid disruptions to tenant comfort and align with lease terms.

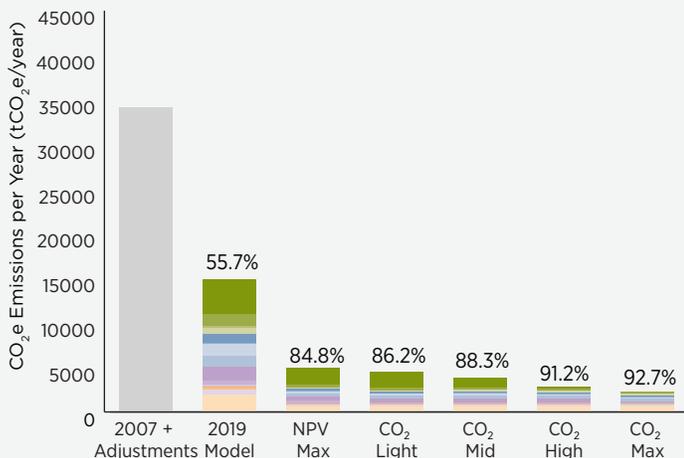
We modeled two different scenarios. In the first, the grid that services New York City remains "static", as it was in 2019; in the second, grid emissions are adjusted in alignment with the CLCPA. The static grid packages results ranged from a reduction of 66.3% to 78.1% emissions reduction from the 2007 baseline year. The CLCPA scenario packages ranged from 84.4% to 92.7% reduction from the 2007 baseline year.

The CO₂ max packages represent the maximum possible energy and emissions reduction based on what is technically possible. Packages leading up to this point represent incremental additional projects and measures to achieve reductions with associated projected economic results.

PROJECTED CO₂ EMISSIONS

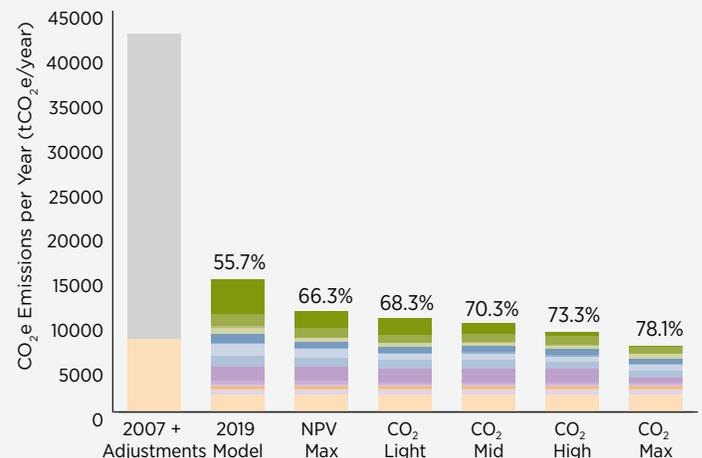
STATIC 2019 GRID SCENARIO

Packages range from 66.3% to 78.1% reduction in total emissions from 2007 benchmark year



CLCPA GRID SCENARIO

Packages range from 84.8% to 92.7% reduction in total emissions from 2007 benchmark year



- 2007 + Adjustments
- Space Heat
- Cooling Towers
- HVAC Fans
- Office Equip
- IT Equip
- Retail Equip
- Observatory Equip
- Broadcast
- Space Cool
- CHW/CW Pumps
- DW Pumps
- Office Lights
- DHW
- Exterior Lights
- Elevator Load

We target accomplishment of an 80% reduction of operational carbon from the 2007 baseline with a payback against investment of 5-7 years or better. We will offset any remaining carbon emissions for which total carbon reduction is not technically or economically feasible on site.

As demonstrated in the static grid line graph below, none of the modeled packages will achieve an 80% emissions reduction or compliance with LL97 limits without work by the city to improve the grid, highlighting the challenge to achieve carbon neutrality or compliance with LL97 with a static New York City grid.

The CLCPA grid scenario graph illustrates that all packages ensure the Empire State Building achieves an 80% reduction from baseline and three of the five packages project compliance with LL97 long term 2035-2050 emissions limits.

At this time, ESRT plans to move forward with select measures from the package known as “CO₂ mid” which projects an 88% emissions reduction based on the projected performance of projects and a CLCPA compliant grid with a 6.8 year payback or less.

ESRT will annually report progress against our goals in the Sustainability Report to document completed projects, savings (financial and emissions), and new technologies we have successfully deployed. We will continue to share adjustments to our process and lessons learned with the real estate community through our reporting and through updates to the playbook.

EMPIRE STATE BUILDING HIGHLIGHTS



ENERGY STAR Certified since 2010



LEED EB O&M v4 Gold

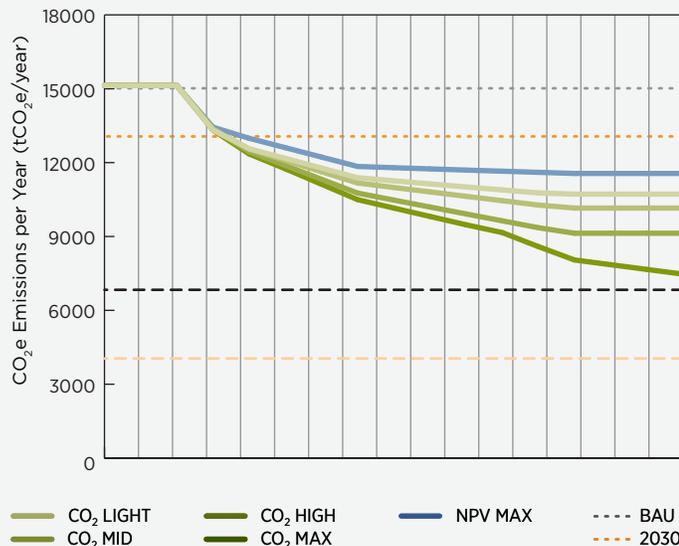
Tenants achieved LEED CI Gold and Platinum Certifications

A full posting of our Version 2.0 work, per building, can be found at <https://knowledge.nyseda.ny.gov/display/EDPD/The+Decarbonization+Playbook>

PROJECTED ANNUAL CARBON EMISSIONS

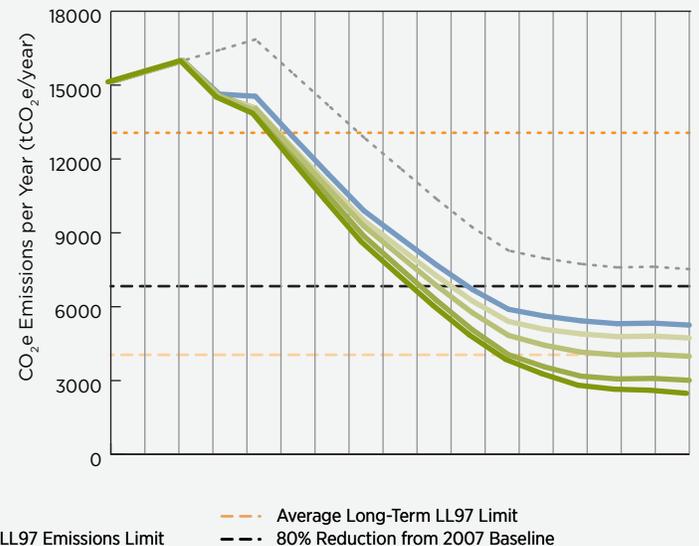
STATIC 2019 GRID SCENARIO

No packages would meet 80% reduction from 2007 baseline by 2035; No packages would meet average long-term LL97 limit



CLCPA GRID SCENARIO

All packages would meet 80% reduction 2007 baseline by 2030; Only CO₂ Mid package would meet average long-term LL97 limit





SOCIAL



Our single greatest asset is our team. We set measurable goals to deliver a healthy work environment, well-being, and personal and professional growth for our team members. We work with external and internal resources to create a diverse and inclusive workplace and set goals to measure and verify our progress. We report on all these matters to our Board of Directors.



Employees

ESRT's team members demonstrated remarkable resilience and the strength of our culture as we returned to the office in July 2020. Our presence in the office has enabled ESRT to collaborate to pivot and flex to achieve our goals as a team, prioritize talent development, participate in numerous engagement activities together, and engage with our local community through volunteer activities chosen by our colleagues.

We focus on internal development, retention of talent, attraction of team members ready to work towards our ambitious goals, and community engagement. We gather feedback through employee surveys and listening sessions and integrate this feedback into our policies and practices. We conduct an Annual Employee Engagement Survey in Q1, and quarterly Employee Engagement "Pulse" Surveys to gather the views of each employee of their own self, department, and of the company. We utilize interdepartmental committees to recommend opportunities for improvement.

We drew on insights from our 2020 and 2021 surveys and the work of multiple interdepartmental committees and improved internal communication, initiated company-wide inclusion training, ensured diverse perspectives are represented, continued to encourage and deliver targeted learning and development programs to facilitate pathways for career growth, and revised our Employee Manual to ensure our policies and procedures accommodate our teams' needs and are sensitive to their preferences so that we can fulfill our mission for our stakeholders.

Even in the face of disruptions from COVID, our Annual Employee Engagement Survey in Q1 2022, had an 82% engagement score and revealed the following:

- 98% of employees reported they feel the company is committed to a sustainable environment
- 90% of employees reported they feel the company offers engagement events that foster employee appreciation and camaraderie
- 88% of employees were proud to work at ESRT
- 92% of employees were proud of the quality of service we provide to our customers

To maintain continuous, timely feedback we commenced Employee Engagement Pulse Surveys, shortened, quarterly five-question versions of our Annual Survey which provide us with valuable insight and information throughout the year.



EMPLOYEE SATISFACTION

Our commitment to our employees is exemplified by the results of our 2022 annual employee satisfaction survey

98% of employees reported they feel the company is committed to a sustainable environment

90% of employees reported they feel the company offers engagement events that foster employee appreciation and camaraderie

88% of employees were proud to work at ESRT

92% of employees were proud of the quality of service we provide to our customers

In an effort to evolve and enhance our employees' experience, our employee-led Employee Manual Committee addressed key feedback from Employee Engagement Surveys. New initiatives in 2021 include:

| | |
|--------------------------------|--|
| Paid leave | Six fully paid weeks off in addition to any short-term disability leave, and secondary caregivers may take two fully paid weeks off coupled with extra work from home time, in each case concurrently with state and federal leave programs. |
| Bonding Leave Policy | Bonding Leave Policy for primary and secondary caregivers |
| Work-from-home | Up to six work-from-home days per month, dependent on department and business needs |
| Paid volunteer day | One paid day per annum for volunteer work at an organization of the team member's choice |
| Town Hall meetings | Quarterly, post-earnings NEO Town Hall meetings in addition to our twice yearly and continued departmental CEO-led Q&As to further demonstrate our commitments to company vision, engagement, and culture. |
| New holiday observances | Observe Juneteenth (June 19 th) and Italian Heritage Day/ Indigenous Peoples' Day |

EMPLOYEE ENGAGEMENT

Our employees are the core of our company, and therefore engagement and communication are essential to our success. Each month we issue an internal newsletter, named the *HR Muscle*, which highlights exceptional individual employee performances, LinkedIn Learning and development opportunities, work anniversaries and birthdays, upcoming employee events such as guest speakers and pop-ups, employee volunteerism, new hires, open positions, and much more. Employee engagement events include monthly Gratitude Friday lunches, Employee Appreciation events, holiday celebrations, educational seminars, and company-wide Athletics Committee events, among others. The Benefits Corner in the *HR Muscle* newsletter elaborates on benefits such as our Employee Assistance Program (EAP) to ensure employees understand the benefits available. This year, to better support employee financial well-being, we engaged a new financial advisor to assist with retirement readiness and financial wellness for all employees.





EMPLOYEE HEALTH, SAFETY, WELLNESS

The safety, health, and wellness of our employees and their families is a primary focus for us. To support this commitment, we offer a range of programs and a robust and comprehensive benefits package to our corporate employees.



Employee Safety Protocols

- Emergency response training
- Mandatory first aid/OSHA training
- Crisis management team
- On-site mandatory fire safety training
- Cyber incident training and simulations



Employee Health & Wellness Protocols:

- Quarterly company- provided guidance on nutrition, stress management, sickness prevention, and healthy living
- Collaborative open workspaces with abundant natural light and ventilation in corporate headquarters
- Standing and ergonomic desks



Employee Benefits

- Pre-tax Benefits
- Medical, Rx, Telemedicine, Dental, Vision coverage
- Commuter benefits program
- Health Savings and Flexible Spending accounts



Income Protection: ESRT Paid Benefits

- Life insurance
- Short & long-term disability



Work Life Balance

- Flexible Fridays
- Flexible remote work policy
- Holiday and paid time off
- One paid day per year to volunteer at an organization of choice



Well-being

- Complimentary membership to state-of-the-art fitness center at the Empire State Building
- Employee Assistance Program to provide emotional support, work-life solutions, legal guidance, and financial resources programs
- Additional programs through medical benefits provider
- include support for employee health goals, weight loss goals, gym reimbursement, and smoking cessation
- Health Advocacy, which provides a Benefits VIP to answer claims and eligibility concerns



Perks at Work

- Complimentary Empire State Building Observatory access
- Company-sponsored athletic events through our Athletics Committee
- Plum Benefits (Corporate Entertainment Benefits provider)
- Company-sponsored team building events
- Access to LinkedIn Learning



Retirement

- Comprehensive financial planning services with our retirement plan consultant

PROFESSIONAL DEVELOPMENT & TRAINING

We are fully committed to invest in the professional development of our people. Our dynamic learning programs allow employees to grow professionally and personally, and strengthen their interactions with colleagues and clients. We aim to foster a learning and development culture which allows employees to bring their whole selves to work. Some of our programs are listed below:

| | |
|---|--|
| Enhanced New-Hire Onboarding Program | We have reimagined our new hire onboarding program to include more developmental conversations and increased feedback from new hires to ensure we are providing a best in class employment experience. |
| Empire Academy: | <p>Empire Academy continued to showcase our investment in learning programs, resources, and tools to elevate performance and achieve our goals. This year our Empire Academy program provided monthly educational seminars for employees to enhance their understanding on a variety of topics such as:</p> <ul style="list-style-type: none"> • Meet the Board series • Meet the Executive series • Sustainability initiatives • Financial Wellness • NYPD - How to stay safe and secure while commuting • Salesforce and Tableau • Cyber Security • Insider Trading • Alteryx • Talent Acquisition: How We Attract and Onboard Talent |
| Tuition Assistance Program | To encourage and support our employees in their growth to success, the company considers tuition assistance for those taking courses related to their current position. Employees who have one year of experience with us may request a tuition reimbursement to be approved by their manager. |
| Employee Performance Review | We value the feedback of our employees in the development of our strategies and thus administer an annual performance appraisal process in Q4, complementing a mid-year review in June. In 2021, we added a 360-feedback component, which allows employees to gain feedback from their manager, direct reports, and peers of their choice to further employee growth and development. |
| Talent Development | Our Human Resources team regularly engages with managers to discuss employee growth paths, development opportunities and succession planning. We utilize a talent management tool bi-annually to actively assess talent potential and performance. |
| DE&I Training | To further our commitment to diversity, equity, and inclusion (DE&I) in the workplace, beginning in 2021 we held two company-wide DE&I trainings, which were conducted by an external consultant and will continue to be part of our DE&I strategy. |
| Ethics | <p>Our Board has adopted a Code of Business Conduct and Ethics, which applies to our directors, officers, and employees and is reviewed and overseen by our Nominating and Corporate Governance Committee. We train our employees on the Code annually and provide additional compliance training on key topics on a rotational basis, including insider trading, anti-harassment and discrimination, and cybersecurity. All employees are required annually to reaffirm their compliance with the Code.</p> <p>Employees are encouraged to speak up about misconduct and required to report suspected or known Code violations. The Code prohibits retaliation against anyone who raises any issue or concern in good faith. Any waiver of the Code for our directors or executive officers may be made only by our Board or one of our Board committees.</p> |

MANDATORY TRAININGS

All employees must complete mandatory training annually, including without limitation:

- Sexual Harassment
- Bribery & Corruption
- Employee Manual Recertification
- Insider Trading
- Cybersecurity
- Inclusion



Tenants

Our tenants are our top priority, and we focus on the creation of healthy, productive, and sustainable built environments that attract and retain tenants and position us for long-term success. We elicit feedback from our tenants through annual tenant satisfaction surveys performed by a third-party across 100% of our portfolio regarding property management and sustainability. In addition, we directly engage with our tenants via town halls and education sessions specifically focused on sustainability.

We partner with tenants to develop customized Tenant Sustainability Programs and Initiatives, sustainability training sessions, and maintain consistent tenant communications through in-person meetings, conversations, outreach, and emails. We have created a Tenant Services webpage and a Tenant Sustainability Toolkit on our website to further educate our tenants on our sustainability efforts and increase engagement around sustainability.

Investors & Shareholders

Our Board is committed to frequent engagement with management and key stakeholders on our ESG, compensation, and company strategy matters. We conduct annual governance roadshows with our shareholders and offer director attendance. Following our 2021 annual meeting, we contacted shareholders representing approximately 80% of our common stock to offer meetings, and we held meetings with all institutional shareholders who accepted our invitation. Our SVP, Director of Energy, Sustainability and ESG, investor relations, legal and senior management team also engage with our shareholders throughout the year in a variety of forums including an emphasis on 1:1 engagement. Direct results of these engagements have driven increased disclosures and reporting.

Community

Empire State Realty Trust is a fixture in the communities where we operate and we have developed strong partnerships to foster community engagement and leadership, to better the places where we live and work. Through community leadership, charitable donations, and volunteerism, we deliver on our commitment to our communities. We believe community engagement through employee involvement is an enriching component of our ESG strategy.

Community Engagement Programs: Community Leadership; Charitable Donations & Event Participation

- To further the development of a community engagement program with an emphasis on employee volunteerism in our communities, including company-sponsored volunteer events and philanthropy.
- To elevate our employee volunteerism, we have implemented a program to track employee volunteer hours so that we can report impactful and measurable community engagement metrics.
- Introduced VTO (volunteer time off)

This year our employees sought active community engagement through volunteerism through participation in events such as:

- **Harlem Grown:** A non-profit organization that provides mentorship opportunities to youth in Harlem, NY through hands-on education on urban farming, sustainability, and nutrition.
- **The Billion Oyster Project:** A non-profit organization focused on the incorporation of volunteer efforts and education in biodiversity restoration of the degraded New York Harbor.
- **Start Small Think Big:** A nonprofit that helps transform underserved entrepreneurs' businesses with high potential and limited access to necessary resources into thriving businesses by providing pro bono legal, financial and marketing services. Individuals within the accounting department contributed to this initiative by providing bookkeeping and forecasting guidance to local entrepreneurs. During a short span of time, volunteers learned about the entrepreneurs' specific businesses and provided practical advice and insights derived from their professional expertise.
- **Read to Lead:** A nonprofit that introduces kids in underserved communities to technology that fosters literacy and teaches leadership and career skills at an early age. Employees participated in virtual career fair to provide insight on careers in commercial real estate.
- **NYC Parks:** Employees have volunteered through NYC Park Partnerships to assist with community clean-ups in areas such as St. Nicholas Park, Coleman Playground, and Adam Clayton Powell Boulevard.
- **Blood Drives:** Annually, we partner with the New York Blood Center to host an onsite blood drive event for employees who are able to donate.
- **Gallop:** Employees assisted instructors during therapeutic horse-riding lessons.
- **Animal Haven:** We partnered with a local animal shelter in our community to assist animals in need.
- **St. Francis Pantry:** To assist with meal donations, we partnered with St. Francis Pantry to have 2100 sandwiches made/donated for those in need. Employees made sandwiches in our breakroom in our 111 W 33rd Street office and contributed \$1.25 per sandwich made, a total of \$2,625.
- **Toys for Tots Drive:** During the holiday season, both employees and tenants were encouraged to donate unused toys in our 111 W 33rd Street location for children and families in need.

Our diverse summer intern class was given first-hand exposure to the real estate industry and a chance to get to know both fellow interns and ESRT colleagues (including senior management). The internship offered real-life experience working on ESRT projects through shadowing and on the job training and an opportunity to work in our portfolio of properties. The interns were tasked with a group project to generate recommendations on how tenants can feel safe and confident in their return to the office. Recommendations were presented to Senior Management Team at the conclusion of the program. The interns also hosted a volunteer event to beautify a street in Harlem in partnership with NYCares. We acknowledged the stellar performance of our summer interns and congratulated them in the spotlight of our August 2021 HR Muscle newsletter.



The Empire State Building lights up 365 days a year, and many of the lightings are directly related to social and charitable causes. Its lights turned blue on October 13th, 2021, to highlight more than 36,000 buildings that have earned the EPA's ENERGY STAR certification. On August 30th, 2021, the Empire State Building displayed red lights to honor our partnership with the Broadway League, mark the "This is Broadway" campaign, and the return of Broadway theatre. The building produced a light show in sync with the score of the 45th annual Macy's Fireworks show, hosted at the building to celebrate Independence Day as it launched thousands of fireworks from the building's 72nd, 86th, and 103rd floors, and lit up in dramatic red, white, and blue flourishes on the evenings of July 3rd and 4th. In honor of the 2021 Tokyo Olympics, the iconic tower lights rotated through the colors of the flags of 206 countries throughout the night of July 23rd. The building also illuminated the skies on October 11th, 2021, with colors of green, red, and white in honor of Indigenous/Italian Heritage Day.

The annual Empire State Building Run-Up event challenges runners around the world to race up its famed 86 flights and 1,567 stairs, noted by some as the ultimate endurance test. After cancellation in 2020 due to the pandemic, it was resumed on October 26th, 2021, presented by Turkish Airlines and powered by the Challenged Athletes foundation. To honor this event, the Empire State building displayed red and white lights.

21%

In 2021, we awarded over 21% of contracts totaling nearly \$7 to MWBE business owners.



100%

of brokers completed sustainability training in 2021



Vendors and Procurement

We have implemented new initiatives to audit vendors, services, contractors, and supply chain diversity and emphasize the importance of diversity.

Our Vendor Code of Conduct guides ESRT vendors to meet our mandates and helps promote and measure sustainability, diversity, and ethical conduct in our vendor relationships. We seek vendors that provide products and services that embrace ESRT’s commitment and enforce the Code provisions throughout their organization and across our supply chain. In 2021, all vendors signed on to ESRT’s Vendor Code of Conduct.

In 2021, we implemented programs to drive Supply Chain Diversity through inclusion of underrepresented groups in all bids. In 2021, we awarded over 21% of construction project contracts totaling nearly \$7mm to MWBE (minority and women owned business enterprise) business owners.

Our procurement practices promote the procurement of sustainable goods, such as green cleaning products and sustainable building materials, as a method of fostering health and wellness of our employees and tenants.

Brokers

Our brokers receive continuous education on our actions to ensure they understand the details and clearly convey our value proposition, including frequent training sessions on ESRT’s High-Performance Sustainable Healthy Building guidelines, health and wellness initiatives, awards, community engagement, corporate social responsibility events and initiatives.

Diversity, Equity & Inclusion

ESRT fosters a community of diverse perspectives and experiences that enhance the effectiveness of our decision-making and innovation. We aim to develop an inclusive and diverse workplace where employees can bring their whole selves to their roles. The implementation of training and development programs, diversity-focused strategies, and transparent reporting of progress with our stakeholder groups that include tenants, investors, and employees, we host a diverse, equitable, and inclusive environment based on our measurable goals. DE&I strengthens our workforce and furthers a stable, supportive, and productive work environment.

In 2021 we engaged a MWBE certified and certified B Corp, Tessi Consulting, that will provide ongoing training and education, developed our DE&I roadmap, and created custom programming to accelerate our DE&I journey. We completed our first training with our expert consultant titled, "Inclusion Starts with I", in the Fall of 2021.

We intend to continue our partnership through 2023 to provide ongoing training and education, develop a DE&I roadmap and create programming to accelerate our DE&I journey.

ESRT EMPLOYEE JOURNEY THROUGH THE DE&I TRAINING PROGRAM

1 Employee is invited to **Inclusion Starts with I Workshop** to understand key concepts of DE&I.

2 After having a foundational understanding of DE&I, employee attends the **Inclusion Continues with You Workshop** to learn techniques and strategies to show up as an ally and apply inclusive communications to their day-to-day work.

3 A couple of weeks later, employee attends the **Inclusion is With All of Us Workshop** where they learn from their colleagues' stories and utilize strategies to create an empowering workplace.

4 After finishing the workshop series, employee evaluates what they learn and determine what changes they want to target to become an inclusive individual at ESRT.

5 Employee is excited to apply what they learn and begin putting everything they learned to practice.

COMPLETED!

Inclusion Starts with I

LEVEL SET AWARENESS

- Advance your understanding of DE&I topics and sentiments
- Recognize how biases manifest in the workplace
- Learn techniques and strategies to minimize impact of biases in the workplace
- Learn how to confidently handle mistakes
- Provide techniques to explore ways to adopt the mindset and micro habits and becoming an inclusive individual

* Provided by our MWBE consulting firm Tessi Consulting.

Based on employee feedback from the initial training and guidance from Tessi consulting, we have engaged them to work with us on implementation in 2022:

DE&I ROADMAP 2022

Overview of the DE&I journey at ESRT.

1
Due Diligence
Brief review of the historical knowledge of the organization's policies & procedures and previous DE&I efforts and initiatives.

2
Executive Visioning Workshops & 1:1 Executive Coaching
Develop & launch executive visioning workshop and coaching as a primer on DE&I topics. Align on DE&I goals and the path forward.

3
DE&I Strategy & Companywide Rollout
Develop a DE&I strategy and tactical 12-to-24-month roadmap, and metrics to begin a broader DE&I journey.

4
Inclusion Committee Strategic Planning Sessions
Provide strategic planning sessions with the Inclusion Committee to create an execution plan for Inclusion Committee Charter roadmap.

5
DE&I Training Approach & Workshops
Executive additional DE&I training workshops to advance the knowledge of DE&I topics. Provide a DE&I resource toolkit to reinforce messaging. Create a 2- to 3-year DE&I organizational training plan and curriculum.

**INCLUSION IN BLOOMBERG GENDER EQUALITY INDEX**

The Bloomberg Gender Equality Index (GEI) tracks the performance of public companies committed to transparency in gender-data reporting. As we aim to cultivate a diverse and equitable workforce, we submitted our data to this platform in 2021 to track our progress and ensure equal opportunities are present in our departments. We will disclose our results in the beginning of 2022.

AS OF YEAR-END 2021 OUR CURRENT DE&I INITIATIVES INCLUDE:**2021 ACCOMPLISHMENTS****Discrimination-Free Workplace**

As outlined in our Employee Handbook, everyone has the right to work in an environment that promotes equal opportunities and prohibits discriminatory practices, including sexual and other discriminatory harassment and retaliation. In keeping with this commitment, we will not tolerate unlawful discrimination (including any form of unlawful harassment or retaliation) at work or in work-related settings by or against anyone.

Vendor Code of Conduct

Our Vendor Code of Conduct guides ESRT vendors to meet our mandates and helps promote and measure sustainability, diversity, and ethical conduct in our vendor relationships. We seek vendors that provide products and services that embrace ESRT's commitment and enforce the Code provisions throughout their organization and across our supply chain.

2022 PRIORITIES**Hiring Practices**

We are focused on diversity in applicant pools for every hire. To achieve this, we have implemented systems to track candidates through the HR process to ensure at least 25% of candidates presented to hiring managers for open roles, including our internship program, represent diverse persons, where possible. We work with our recruiting firms to emphasize our requirement for highly qualified candidates from diverse backgrounds.

Pay Equity

We believe people should be paid for what they do and how they do it, regardless of gender, race, religion, or other identity or personal characteristics. We set pay based on market data, as well as an individual employee's performance, experience, and seniority. We consult with an independent third-party expert to review our pay practices.

Supply Chain Diversity

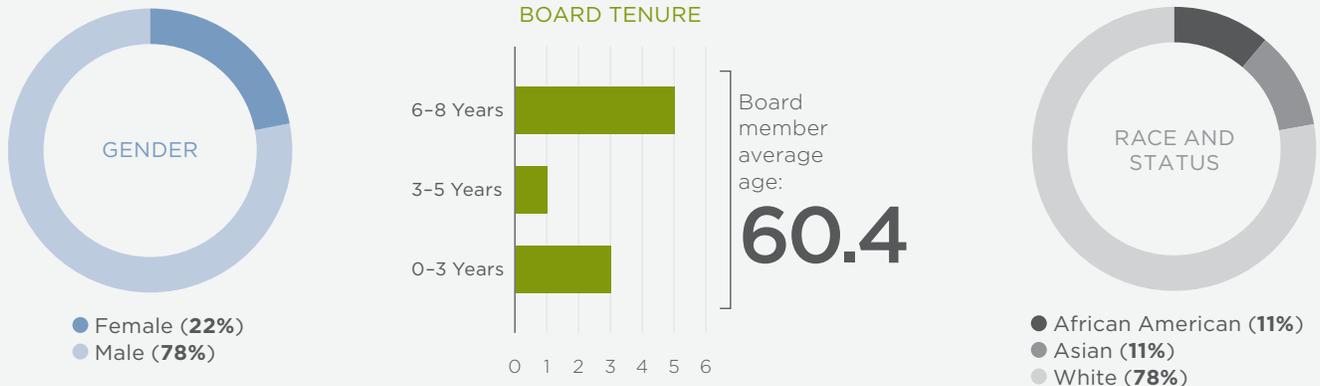
Per the policy we implemented in 2021, when a project goes out to bid, one out of every four vendors must be diverse, where possible. Our project management team takes the necessary steps to align with Industrial and Commercial Abatement Program diversity guidelines. As members of the Real Estate Roundtable's Supplier Diversity Initiative Committee, ESRT has provided feedback and recommendations for the necessary infrastructure to support a diverse supply chain for the real estate sector. Recommendations include centralized repository of data on diverse suppliers, education and development programs, insurance and financial solutions for diverse suppliers, etc.

Inclusion Committee

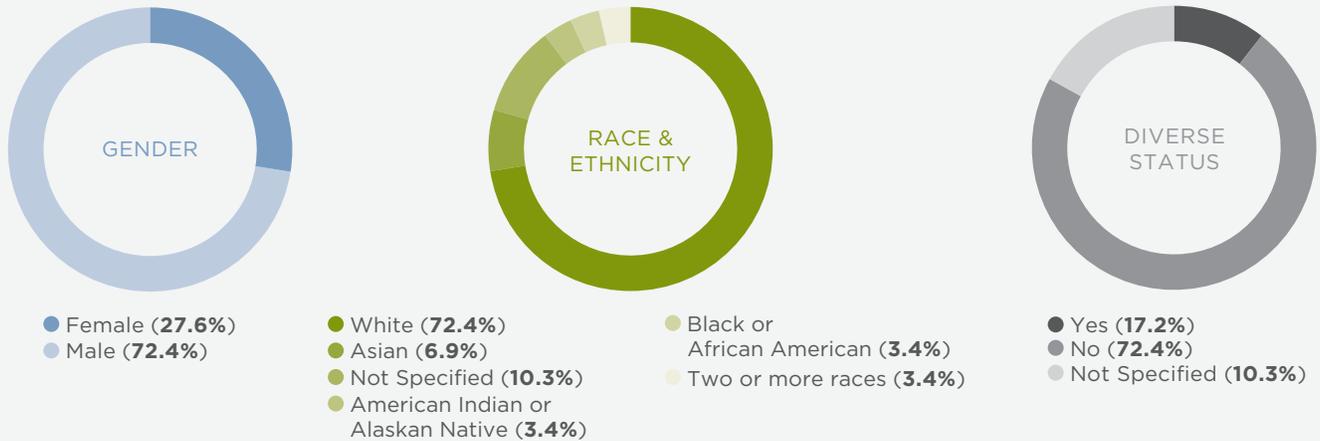
We formed an employee-led Inclusion Committee to assist in our effort to develop and maintain our inclusive workforce and strive for measurable goals with appropriate transparency to our colleagues and board.

BOARD OF DIRECTORS

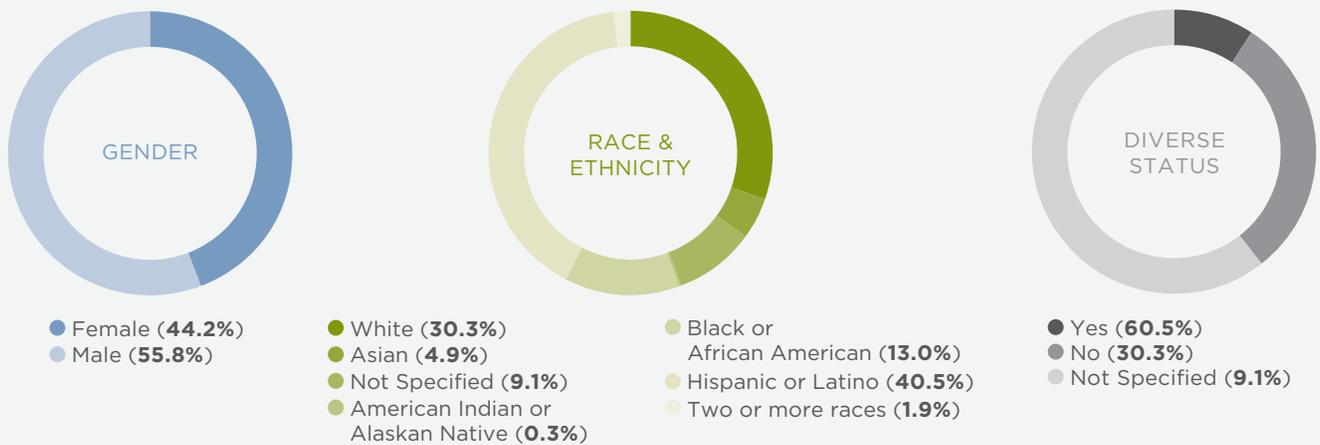
Our Board of Directors represents diversity in age, gender, perspectives, and experience. We value each component as a link to new ideas and constituents. The diversity metrics are based on independent Board members.



SENIOR MANAGEMENT (VICE PRESIDENT AND HIGHER)



ALL EMPLOYEES





GOVERNANCE



ESRT believes that sound corporate governance is at the heart of any successful company, and integration of effective governance initiatives strengthens both our company and our ESG program.

Board & Management Oversight of ESG

As ESG is a critical part of our business strategy, our entire board has responsibility for ESG oversight. Recognizing the significance, attention and focus that ESG strategy requires, our board has delegated specific ESG responsibilities to each of its committees as specified in the Committee Charters:

| GOVERNING BODY | SUSTAINABILITY-RELATED RESPONSIBILITIES | 2021 SUSTAINABILITY-RELATED DISCUSSIONS |
|--|---|---|
| Board | While the Nominating and Corporate Governance Committee makes recommendations with respect to ESG matters, the board has ultimate decision-making authority. ESG matters that may arise from other committees are also referred to the full board as appropriate. | Presentations by SVP, Director of Energy, Sustainability and ESG on topics such as Local Law 97, ESB 2.0, ESG disclosure frameworks and climate risk disclosure rulemaking and social matters such as DE&I and talent management. |
| Audit Committee | As part of its oversight of the company's Enterprise Risk Management (ERM) program, the committee reviews and discusses the company's risks and mitigants related to ESG, including environmental risks like climate change. | Regular discussions regarding ESG risks with internal audit consultant and management and presentation on cybersecurity risks and tabletop exercise with external consultant. |
| Compensation and Human Capital Committee | The committee is responsible for overseeing the company's strategies and policies related to human capital management, including with respect to matters such as DE&I, workplace environment and culture, pay equity, and talent attraction and retention. | Regular discussions regarding human capital management, talent attraction and retention and compensation. |
| Finance Committee | The committee considers ESG opportunities and strategy in reviewing and analyzing significant transactions and financings. | Regular discussions regarding review of economic implications of environmental risk and potential for enhancements to energy efficiency and indoor environmental quality within portfolio and in acquisition targets. |
| Nominating and Corporate Governance Committee | The committee is responsible for considering social responsibility, environmental and sustainability matters, and making recommendations to the board regarding such matters. | Presentations by SVP, Director of Energy, Sustainability and ESG and Chief Talent Officer on topics such as ESG certifications and ratings, employee engagement, community outreach and sustainability report. |

Our comprehensive, top-down approach to ESG is supported by the employee-led Sustainability Committee, led by our SVP, Director of Energy, Sustainability and ESG, and executed by the property management teams across our portfolio. The Sustainability Committee meets quarterly, and the standing members include our Chairman, President and CEO, CFO, Director of Leasing, property construction and operating executives and members of the legal, marketing and investor relations teams. The committee's agenda has evolved over time to reflect our company's proactive leadership and commitment to results.

Risk Management

A key part of our business and ESG decision-making process is to maintain an effective risk oversight process to enable the Board to monitor, evaluate, and act with respect to identified risks. Our Senior Management Team is responsible for the day-to-day management of enterprise risks, including through the management of the company’s Enterprise Risk Management program. Management actively identifies, monitors and implements mitigation strategies with respect to such risks. As part of the ERM program and committee oversight responsibilities under the Committee Charters, management provides regular updates to the Board and relevant committees. Some examples of committee risk oversight responsibility as it relates to ESG include:

- Audit Committee oversees policies with respect to risk management, including among others, cybersecurity risks, and ESG risk, including climate change and including climate related risk and human capital.
- Compensation and Human Capital Committee oversees human capital management risks, including DE&I, culture, pay equity, and talent attraction and retention.

Board Diversity

The Board seeks diverse composition in terms of race, gender, age and experiences. We have added 4 new independent directors since 2017, 3 of whom are diverse in terms of gender and/or race ethnicity. In 2021, we amended our Corporate Governance Guidelines to codify our commitment to diversity by adding “Rooney Rule” language requiring that:

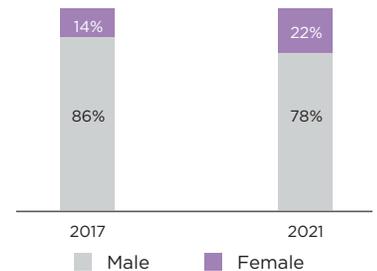
The Nominating and Corporate Governance Committee shall seek to include candidates with a diversity of race, ethnicity and gender in the pool from which such Committee recommends candidates.

DE&I Risk Management

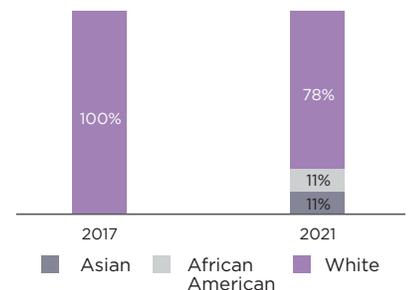
To assist in the identification and mitigation of risk, we actively pursue a diverse and inclusive workforce to provide us with a knowledgeable and holistic approach to our work. We view diversity, equity, and inclusivity as core to our business strategy, not only from a workforce development perspective, but an integral piece to our success as a corporation. We continue to strive towards improvement of diversity for senior management and our Board in addition to our employee body, through implementation of measurable and actionable goals, and impactful strategies.

ESRT BOARD OF DIRECTORS

Gender Diversity



Racial/Ethnic Diversity





CLIMATE CHANGE AND RESILIENCE

Climate change poses significant risks, both physical and transitional, to the real estate sector. Our ability to assess and respond to potential climate change impacts is critical to our survival as a company.

In 2021, we responded to the GRESB Assessment which evaluated our organization against TCFD criteria and our approach to climate-related social risks. Our assessment is below.

| | CATEGORY | MANAGEMENT OF POTENTIAL IMPACT |
|------------------|--|--|
| PHYSICAL RISKS | Acute Weather Events Flooding, Hurricanes, Winter Storms, Extreme Temperatures | We have developed a Climate Change Adaptation and Resilience policy for standing investments and a Climate Change Risk Assessment Checklist to be completed during the due diligence process. The policy and checklist include assessments of potential physical risks such as power interruption, flooding, heat waves, hurricanes, and winter storms. |
| | Geographic Concentration Risk | The Geographic Concentration Risk is identified as a potential chronic risk, which acknowledges that natural disasters and long-term shifts in climate patterns such as sea level rise, could make a large portion of the portfolio non-operational or inaccessible. |
| SOCIAL RISKS | Physical Security and Terrorism | Due to the high-profile nature of our standing investments, particularly the Empire State Building, we have identified physical security and terrorism as a potential Social Risk. Mitigation strategies employed by ESRT include a Director of Security at the Empire State Building, formal crisis management plans, in-person electronic surveillance at all entry points, active shooter trainings for employees and tenants, and Terrorism Reinsurance Act coverage that covers nuclear, biological, chemical or radiological weapon attacks. |
| | Human Health | We perform annual Indoor Air Quality (IAQ) testing at all standing investments to evaluate exposure and risks to human health. All IAQ tests are reviewed to ensure contaminants remain below the most stringent acceptable levels. For any assets that do not meet our performance thresholds, actions are taken to address and remediate issues. We have deployed active bipolar ionization air purification technology across one million square feet of our portfolio. |
| | Cybersecurity | We have firewall and penetration testing, cybersecurity insurance, internal employee trainings on safeguarding information, a Director of Information Security dedicated to cybersecurity, cyber training modules, and a continual assessment of new cybersecurity tools. |
| TRANSITION RISKS | Policy Risks Energy and Climate Legislation | We evaluate energy and climate legislation in regions and cities where we operate, including evaluating the compliance status with legislation concerning our carbon footprint and measuring the financial impact of energy and climate legislation including the NYC Climate Mobilization Act. |
| | Technology Risks Capital Investments in Low-Carbon Technology | We evaluate innovative technologies to help mitigate climate-related risks. These include advanced optimization and machine learning technologies, battery storage, renewable energy, lighting and controls, building management systems, equipment and tenant plug loads and controls. |
| | Market Risks Abrupt/unexpected changes in energy costs | We evaluate abrupt or unexpected changes in energy costs and market perceptions by investors. We plan long-term contracts for certainty, predictability, and risk mitigation on utility pricing. |

Physical Risk

ESRT evaluates exposure to physical climate risks for standing investments and new acquisitions during the due diligence process. ESRT works to identify climate related risks, implement mitigation strategies, and reduce the economic impacts of climate change across the portfolio.

ESRT has developed a Climate Change Adaptation and Resilience Policy and Climate Change Risk Assessment Checklist to complete for every property during the due diligence process and for standing investments. This assessment includes physical risks such as power interruption, flooding, heatwaves, hurricanes, winter storms, and regulatory risks.

Furthermore, via the Enterprise Risk Assessment performed by our internal auditor in conjunction with our Senior Management Team in 2021, Disaster Recovery and Business Continuity resulting from these events was identified as an inherent risk. Geographic Concentration Risk was also identified in that a natural disaster could make a large portion of the portfolio non-operational or inaccessible. The risk assessment program identified mitigation strategies which ESRT currently has in place, including a formal disaster recovery plan and business continuity plan that has been communicated to employees and tested, and disaster recovery, and business continuity through multiple insurers which diversifies the risk basis. These were activated in ESRT's preparation and response to Super Storm Sandy.

Transition Risk

As part of the Board's oversight of ESG, and in coordination with the ESRT Senior Management Team, ESRT regularly evaluates and prioritizes key transition risks including policy and legal issues, specifically regarding climate and energy legislation and carbon mandates, enhanced environmental reporting requirements, increasingly stringent building/energy codes, technology, and market risks. Transition risks are identified through the Enterprise Risk Assessment performed on a quarterly basis, and ongoing review and evaluation of relevant policy, legal, technology, market and reputational risks that may affect the organization.

We evaluate compliance status with legislation related to our carbon footprint and measurement of the financial impact of energy and climate legislation, including the New York City Climate Mobilization Act and Local Law 97.

We evaluate abrupt or unexpected changes in energy costs and market perceptions by investors and tenants. We plan long-term contracts for certainty, predictability, and risk mitigation on utility pricing.

We evaluate technology risks related to capital investments in low-carbon technology in conjunction with the evaluation of innovative technologies to help mitigate risks, such as advanced optimization and machine learning technologies, battery storage, renewable energy, lighting, and controls, building management systems, equipment, and tenant plug loads and controls.

In addition, our Chairman, President, and CEO and SVP and Director of Energy, Sustainability, and ESG hold leadership positions on the NYC Climate Mobilization Act Working Group and other relevant working groups to define and understand the material transition risks related to energy/carbon regulation that can impact the organization.

Identification of the risks posed by climate change positions ESRT to better manage and mitigate risks and to provide a return on investment by reducing the economic impacts of climate change more effectively. Our Climate Change Adaptation and Resilience Policy applies to all existing assets as well as potential acquisitions.

Our climate change asset level requirements are the following:

- Conduct comprehensive risk assessments to identify relevant climate change risks
- Analyze climate change risks and potential impact
- Develop operational plan with guidelines for
 - Flooding
 - Windstorm/Hurricane
 - Freeze/Winter Storm



Code of Business Conduct and Ethics

Our Board has adopted a Code of Business Conduct and Ethics, which applies to our directors, officers and employees and is reviewed and overseen by our Nominating and Corporate Governance Committee. We train our employees on the Code on an annual basis and provide additional compliance training on key topics on a rotational basis, including insider trading, anti-harassment and discrimination and cybersecurity. All employees are required annually to reaffirm their compliance with the Code.

Employees are required to speak up about misconduct and report suspected or known Code violations. The Code prohibits retaliation against anyone who raises an issue or concern in good faith. Any waiver of the Code for our Directors or Executive Officers may be made only by our Board or one of our Board Committees. We intend to disclose on our website any amendment to, or waiver of, any provision of the Code that would be required to be disclosed under the rules of the SEC or the NYSE.

MANDATORY TRAINING

All employees must complete mandatory training annually, including:

- Sexual Harassment
- Compliance Manual
- Cybersecurity
- Insider Trading
- Employee Manual

Disclosure Frameworks & Industry Alignment

Transparency is a key component of governance and accountability, as it informs our stakeholders of our actions and their results. We utilize internationally recognized disclosure frameworks as a part of our strategy to ensure full transparency and accurate reporting.

REPORTING

We submit the GRESB Real Estate Assessment annually and strive to align our disclosures with TCFD, which evaluates our organization on our climate-related risks. In 2021 we received a GRESB score of 94 out of 100 compared to our 2020 score of 88 and the global average of 72. We achieved the highest possible score in Leadership, Policies, Reporting, Stakeholder Engagement, Targets, Tenants & Community, Data Monitoring & Review, as well as the highest score of all peers in Disclosure. As an industry leader, this significant improvement demonstrates our commitment to and implementation of our climate resilience and ESG strategies.

We seek to align this report with TCFD, SASB, and GRI standards, which we believe are the highest standards of sustainability transparency. We will utilize these frameworks and standards to continue to show our peers what sustainability accomplishments are possible to achieve, and accurately report progress to investors.

In an effort to align with and respond to industry frameworks, ESRT continually evaluates our scoring to identify potential opportunities to advance our program and exceed industry standards. The below table documents our 2020 and 2021 scores in some of the leading industry ESG frameworks.

| FRAMEWORK | GRI | GRESB | MSCI | ISS ESG | SASB | SUSTAINALYTICS |
|----------------|-----|-------------------|---------|-----------------------|------|---------------------|
| Scoring | Y/N | 0-100 & 1-5 Stars | AAA-CCC | 0-10, lower is better | Y/N | Negligible - Severe |
| 2020 | Y | 88, 5 Stars | BBB | E:3, S:4, G:7 | Y | Low Risk |
| 2021 | Y | 94, 5 Stars | BBB | E:2, S:2, G:7 | Y | Low Risk |

GOAL SETTING

We committed to the Science Based Targets Initiative (SBTi) for the first time in 2021. We submitted corporate GHG reduction goals in line with the 1.5 degree Celsius reduction scenario to the SBTi for evaluation and approval. We are extremely proud of this commitment and hope to be an example to our peers in both the transparency and ambition of our goals.

STRATEGY DEVELOPMENT

To ensure our reporting is comprehensive, we completed a Materiality Assessment in 2021. This assessment collects feedback from our stakeholders on the ESG issues they identify as a significant potential impact and associated level of importance to the business. This process ensures we are aware of and report on these identified issues to our stakeholders and in our public annual reporting. We view this process as critical to ensure we are honest and held accountable in our program and reporting. We intend to complete this process every 3 years.





APPENDICES

About This Report

This is ESRT's second sustainability report. The report covers 2018, 2019, 2020, and 2021 environmental programs and performance. All reported performance data is for the calendar year ending December 31, 2021, unless stated otherwise. All financial data is reported in U.S. dollars. CodeGreen Solutions has calculated and verified the Greenhouse Gas emissions disclosed in this report, in accordance with the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition.

Technology and Innovation Partners

ESRT is proud to partner with organizations to integrate innovative technology across our portfolio. The partners listed below represent a snapshot of the many different organizations that we collaborate with to achieve our goals.

| | | |
|---|---|---|
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GRI Content Index

The Global Reporting Initiative (GRI) provides an integrated, cohesive set of standards that represent the global best practice for reporting on economic, environmental, and social factors. These global standards allow Empire State Realty Trust to become increasingly transparent and showcase our contribution toward a sustainable future.

A GRI Content Index identifying the location of each of these disclosures can be found in the referenced locations through this report.

| DISCLOSURE | TITLE | REFERENCE/LOCATION |
|-----------------------------------|---|---|
| GRI 2: GENERAL DISCLOSURES | | |
| 2-1 | Organizational Details | ESRT Overview |
| 2-2 | Entities included in the organization's sustainability reporting | ESRT Overview |
| 2-3 | Reporting period, frequency and contact point | About This Report |
| 2-5 | External assurance | Data-Driven Performance |
| 2-6 | Activities, value chain, and other business relationships | ESRT Overview |
| 2-7 | Employees | Board Diversity |
| 2-9 | Governance structure and composition | Board & Management Oversight of ESG |
| 2-10 | Nomination and selection of the highest governance body | Board & Management Oversight of ESG |
| 2-11 | Chair of the highest governance body | Letter from Chairman, President, and Chief Executive Officer |
| 2-12 | Role of the highest governance body in overseeing the management of impacts | Board & Management Oversight of ESG |
| 2-13 | Delegation of responsibility for managing impacts | ESRT Overview |
| 2-14 | Role of the highest governance body in sustainability reporting | Board & Management Oversight of ESG |
| 2-15 | Conflicts of interest | Code of Business Conduct and Ethics |
| 2-16 | Communication of critical concerns | Board & Management Oversight of ESG |
| 2-17 | Collective knowledge of the highest governance body | Sustainability Guidelines and Policies |
| 2-18 | Evaluation of the performance of the highest governance body | Professional Development & Training |
| 2-19 | Remuneration policies | Employee Health, Safety, and Wellness |
| 2-20 | Process to determine remuneration | Employees |
| 2-22 | Statement on sustainable development strategy | Letter from Our Chairman, President and Chief Executive Officer |
| 2-23 | Policy commitments | Sustainability Guidelines and Policies |
| 2-24 | Embedding policy commitments | Sustainability Guidelines and Policies |
| 2-25 | Processes to remediate negative impacts | Diversity, Equity, and Inclusion |
| 2-26 | Mechanisms for seeking advice and raising concerns | Code of Business Conduct and Ethics |
| 2-28 | Membership associations | Environmental, Social, and Governance Strategy |
| 2-27 | Compliance with laws and regulations | ESRT Version 2.0 |
| 2-29 | Approach to stakeholder engagement | Social |

| DISCLOSURE | TITLE | REFERENCE/LOCATION |
|--|--|--|
| GRI 3: MATERIAL TOPICS | | |
| 3-1 | Process to determine material topics | Materiality and Stakeholder Engagement |
| 3-2 | List of material topics | Materiality and Stakeholder Engagement |
| GRI 200: ECONOMIC STANDARDS | | |
| 201-2 | Financial implications and other risks and opportunities due to climate change | TCFD |
| 202-2 | Proportion of senior management hired from the local community | 100% |
| 205-2 | Communication and training about anti-corruption policies and procedures | Mandatory Training |
| GRI 300: ENVIRONMENTAL STANDARDS | | |
| GRI 302: Energy 2016 | | |
| 302-1 | Energy consumption within the organization | Environmental Performance |
| 302-3 | Energy intensity | Environmental Performance |
| 302-4 | Reduction of energy consumption | Environmental Performance |
| GRI 303: Water and Effluents 2018 | | |
| 303-1 | Water withdrawal by source | Water Performance |
| GRI 305: Emissions 2016 | | |
| 305-1 | Direct (Scope 1) GHG emissions | GHG Performance |
| 305-2 | Energy indirect (Scope 2) GHG emissions | GHG Performance |
| 305-3 | Other indirect (Scope 3) GHG emissions | GHG Performance |
| 305-4 | GHG emissions intensity | Goals and Targets |
| 305-5 | Reduction of GHG emissions | Carbon Neutrality |
| GRI 306: Waste 2020 | | |
| 306-2 | Management of significant waste-related impacts | Waste Performance |
| GRI 308: Supplier Environmental Assessment 2016 | | |
| 308-1 | New suppliers that were screened using environmental criteria | Vendors and Procurement |
| GRI 400: SOCIAL STANDARDS | | |
| GRI 401: Employment 2016 | | |
| 401-2 | Benefits provided to full-time employees that are not provided to temporary or part-time employees | Employees |
| GRI 404: Training and Education 2016 | | |
| 404-2 | Programs for upgrading employee skills and transition assistance programs | Employees |
| 405-1 | Diversity of governance bodies and employees | Diversity, Equity, and Inclusion |
| GRI 413: Local Communities 2016 | | |
| 413-1 | Operations with local community engagement, impact assessments, and development programs | Community |

SASB Index

| CODE | ACCOUNTING METRIC | 2021 DISCLOSURE |
|--------------------|---|--|
| IF-RE-000.A | Number of assets, by property subsector | Office: Corporate: High-Rise Office: 10 Office: Corporate: Mid-Rise Office: 4 |
| IF-RE-000.B | Leasable floor area, by property subsector | Empire State Realty Trust's office portfolio is comprised of 9.4 million rentable square feet. |
| IF-RE-000.D | Average occupancy rate, by property subsector | Office: Corporate: High-Rise Office: 86.7% Office: Corporate: Mid-Rise Office: 77.54% |

ENERGY MANAGEMENT

| | | |
|---------------------|--|--|
| IF-RE-130a.1 | Energy consumption data coverage as a percentage of total floor area, by property subsector | Total energy consumption data coverage from the Empire State Realty Trust operational portfolio, as a percentage of total/gross floor area, was equal to 100% in 2021 (excluding two multifamily assets acquired on 12/21/21) |
| IF-RE-130a.2 | (1) Total energy consumed by portfolio area with data coverage, (2) percentage grid electricity, and (3) percentage renewable, by property subsector | (1) ESRT's total 2021 energy consumed by portfolio area with data coverage was equal to 353,165 gigajoules (GJ). (2) The percentage of total energy corresponding to grid electricity for all property types was 61%. (3) The percentage of total energy corresponding to onsite renewable energy for all property types was 0.0%, however, ESRT purchased 101,815,221 kwh (366,519 GJ) of Renewable Energy Credits from wind power to offset our electricity consumption. |
| IF-RE-130a.3 | Like-for-like percentage change in energy consumption for the portfolio area with data coverage, by property subsector | Total like-for-like change in energy consumption for the ESRT operational portfolio was 5% from 2020–2021. The COVID-19 pandemic caused a significant reduction of activity in our buildings during 2020 and 2021, resulting in reduced energy consumption, which is beginning to rebound as tenants return to offices. |
| IF-RE-130a.4 | Percentage of eligible portfolio that (1) has an energy rating and (2) is certified to ENERGY STAR, by property subsector | (1) 100% of ESRT's operational office portfolio is benchmarked using ENERGY STAR Portfolio Manager. (2) 76% of ESRT's office portfolio obtained ENERGY STAR Certification in 2021. |
| IF-RE-130a.5 | Description of how building energy management considerations are integrated into property investment analysis and operational strategy | ESRT utilizes Real Time Energy Management (RTEM) to integrate building energy management considerations into property investment analyses and their operational strategy. Real-time energy consumption feedback allows ESRT to realize cost and energy savings opportunities. ESRT has partnered with The New York State Energy Research and Development Authority (NYSERDA) to implement RTEM incentives for control upgrades, chiller plant optimization, tenant energy management, tenant air handling units, lighting controls, plug load monitoring, and ongoing services that use predictive analysis and diagnostic. ESRT has also developed an Energy and Greenhouse Gas Management Policy that holds Portfolio Managers, Property Managers, Tenant Services Coordinators, and the Engineering Managers responsible for knowing their best practices and implementing the policy where possible for all assets under ESRT's control. Portfolio managers are required to request updated Demand Response Plans from managers quarterly. The Energy Management Policy entails best practices such as tracking consumption through ENERGY STAR Portfolio Manager (ESPM), and conducting building energy audits that meet both the requirements of the ASHRAE preliminary energy use analysis and an ASHRAE Level 2 energy survey analysis identified in the ASHRAE Procedures for Commercial Building Energy Audits or equivalent. Additionally it is required that an ASHRAE Level 2 Audit is pursued in conjunction with local law compliance. |

| CODE | ACCOUNTING METRIC | 2021 DISCLOSURE |
|------|-------------------|-----------------|
|------|-------------------|-----------------|

WATER MANAGEMENT

| | | |
|---------------------|---|--|
| IF-RE-140a.1 | Water withdrawal data coverage as a percentage of (1) total floor area and (2) floor area in regions with High or Extremely High Baseline Water Stress, by property subsector | (1) Total water consumption data coverage from the ESRT operational portfolio, as a percentage of total/gross floor area, was equal to 100% in 2021 (excluding two multifamily assets acquired on 12/21/21). (2) 0% |
| IF-RE-140a.2 | (1) Total water withdrawn by portfolio area with data coverage and (2) percentage in regions with High or Extremely High Baseline Water Stress, by property subsector | (1) ESRT's total 2021 water consumed by portfolio area with data coverage was equal to 297,834 m3. (2) 0% |
| IF-RE-140a.3 | Like-for-like percentage change in water withdrawn for portfolio area with data coverage, by property subsector | Like-for-like change in water consumption for the ESRT operational portfolio was -6 in 2020-2021. |
| IF-RE-140a.4 | Description of water management risks and discussion of strategies and practices to mitigate those risks | Empire State Realty Trust strives to reduce water usage and promote conservation efforts by implementing water conservation initiatives including installing ultra-low flow plumbing fixtures and utilizing efficient cleaning and landscaping practices. This policy applies to all existing assets. ESRT's water management policy is broken down by asset-level baseline and performance requirements. The baseline requirements entail the identification of current sources and end uses of potable water at the asset, obtaining billing information—such as account and water meter numbers, and metering locations—tracking water usage through ENERGY STAR Portfolio Manager (ESPM) profiles, and using a water intelligence tool, Wint, to identify potential leaks, monitor water use, analyze water use trends, and identify abnormal consumption trend in real time. ESRTs performance requirements seek to maintain these baseline requirements and build upon them by setting and tracking performance goals, ensuring the ESPM profiles are being updated and water conservation best practices are in place, fixing identified leaks, installing high efficiency low-flow fixtures or retrofit low-flow aerators/ fixtures where appropriate and feasible, and engaging with tenants. |

MANAGEMENT OF TENANT SUSTAINABILITY IMPACTS

| | | |
|---------------------|---|--|
| IF-RE-410a.1 | (1) Percentage of new leases that contain a cost recovery clause for resource efficiency related capital improvements and (2) associated leased floor area, by property subsector | (1) (2) 100% of ESRT's leases for commercial and retail tenants contain cost recovery clauses for energy efficiency upgrades that benefit the tenant. This equates to 9.4 rentable square feet of office space covered by such language. |
| IF-RE-410a.2 | Percentage of tenants that are separately metered or submetered for (1) grid electricity consumption and (2) water withdrawals, by property subsector | (1) Empire State Realty Trust submeters 100% of office tenants for grid electricity consumption across the portfolio. (2) ESRT submeters 0% of office tenants for water withdrawal. |

| CODE | ACCOUNTING METRIC | 2021 DISCLOSURE |
|---------------------|---|---|
| IF-RE-410a.3 | Discussion of approach to measuring, incentivizing, and improving sustainability impacts of tenants | Tenants are a top priority at ESRT as we create healthy, productive, and sustainable built environments. The investments and adjustments to ESRT's practices are geared toward achieving quantifiable improvements in energy efficiency, carbon emissions reductions, water efficiency, waste diversion, and healthy buildings. Annual tenant satisfaction surveys are performed portfolio-wide by a third party, in addition to engaging with tenants through townhalls and sustainability-focused education seminars, to assess property management and sustainability at ESRT. In tandem with tenants, ESRT also developed customized Tenant Sustainability Programs and initiatives and works to maintain tenant communications through in-person meetings, conversations, outreach, and emails. ESRT's Tenants Services webpage and Tenant Sustainability Toolkit, located on ESRT's website, provides tenants with further insight into the sustainability efforts being done across the portfolio. |

CLIMATE CHANGE ADAPTATION

| | | |
|---------------------|--|---|
| IF-RE-450a.1 | Area of properties located in 100-year flood zones, by property subsector | There are no Empire State Realty Trust properties located in 100-year flood zones. |
| IF-RE-450a.2 | Description of climate change risk exposure analysis, degree of systematic portfolio exposure, and strategies for mitigating risks | ESRT evaluates exposure to physical climate risks for standing investments and new acquisitions during the due diligence process. ESRT is committed to the identification of climate related risks, minimization of risks through mitigation strategies, and providing a return on investment and through reductions of the economic impacts of climate change across the portfolio. ESRT has developed a Climate Change Adaptation and Resilience policy and Climate Change Risk Assessment Checklist to complete for every property during the due diligence process as well as for standing investments. This assessment includes physical risks such as power interruption, flooding, heatwaves, hurricanes, winter storms, and regulatory risks. ESRT's climate change asset level requirements include conducting comprehensive risk assessments to identify relevant climate change risks, analyzing climate change risks and their potential impacts, and developing operational plans with guidelines considering flooding, windstorm/hurricanes, and freeze/winter storms. In 2021 an Enterprise Risk Assessment was performed by ESRT's internal auditor in conjunction with ESRT's Senior Management Team. The risk assessment program identified mitigation strategies which ESRT currently has in place, including: a formal disaster recovery plan and business continuity plan that has been communicated to employees and tested, disaster recovery, and business continuity through multiple insurers which diversifies the risk basis. These were activated in ESRT's preparation and response to Super Storm Sandy. |

TCFD Index

| TCFD RECOMMENDED DISCLOSURE | REFERENCE OR REPORT SECTION |
|--|---|
| Governance: Disclose the Organization’s governance around climate-related risks and opportunities | |
| a) Describe the board’s oversight of climate-related risks and opportunities | Board & Management Oversight of ESG |
| b) Describe management’s role in assessing and managing climate-related risks and opportunities | Board & Management Oversight of ESG |
| Strategy: Disclose the actual and potential impacts of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning where such information is material | |
| a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term. | Climate Change and Resilience |
| b) Describe the impact of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning. | Climate Change and Resilience |
| c) Describe the resilience of the organization’s strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario. | Climate Change and Resilience |
| Risk Management: Disclose how the organization identifies, assesses, and manages climate-related risks | |
| a) Describe the organization’s processes for identifying and assessing climate-related risks. | Physical Risk, Transition Risk |
| b) Describe the organization’s processes for managing climate-related risks. Risks include transition, physical, and social risks. | Climate Change and Resilience, Physical Risk, Transition Risk |
| c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization’s overall risk management. Risks include transition, physical, and social risks. | Climate Change and Resilience, Physical Risk, Transition Risk |
| Metrics and Targets: Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material | |
| a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process. | Physical Risk, Transition Risk |
| b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 Greenhouse Gas (GHG) emissions, and the related risks. | GHG Performance |
| c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets. | Goals and Targets |

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Sustainability Report contains forward-looking statements within the meaning of Section 27A of the Securities Act, and Section 21E of the Exchange Act. We intend such forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995 and include this statement for purposes of complying with these safe harbor provisions. You can identify forward-looking statements by the use of terminology such as “believes,” “expects,” “may,” “will,” “should,” “seeks,” “approximately,” “intends,” “plans,” “estimates,” “contemplates,” “aims,” “continues,” “would” or “anticipates,” or the negative of these words and phrases, or similar words or phrases. In particular, statements pertaining to our capital resources, portfolio performance, acquisitions, dividend policy, results of operations, anticipated market conditions and demographics, and ESG goals and targets contain forward-looking statements.

Forward-looking statements are subject to substantial risks and uncertainties, many of which are difficult to predict and are generally beyond our control. They depend on assumptions, data or methods which may be incorrect or imprecise, and we may not be able to realize them. The following factors, among others, could cause actual results and future events to differ materially from those set forth or contemplated in the forward-looking statements:

(i) economic, political and social impact of, and uncertainty relating to, the COVID-19 pandemic; (ii) a failure of conditions or performance regarding any event or transaction described herein, (iii) resolution of legal proceedings involving the Company; (iv) reduced demand for office, multifamily or retail space, including as a result of the COVID-19 pandemic; (v) changes in our business strategy; (vi) changes in technology and market competition that affect utilization of our office, retail, broadcast or other facilities; (vii) changes in domestic or international tourism, including due to health crises such as the COVID-19 pandemic, geopolitical events, currency exchange rates, and/or competition from recently opened observatories in New York City, any of all of which may cause a decline in Observatory visitors; (viii) defaults on, early terminations of, or non-renewal of, leases by tenants; (ix) increases in the Company’s borrowing costs as a result of changes in interest rates and other factors, including the potential phasing out of LIBOR after 2021; (x) declining real estate valuations and impairment charges; (xi) termination of our ground leases; (xii) changes in our ability to pay down, refinance, restructure or extend our indebtedness as it becomes due and potential limitations on our ability to borrow additional funds in compliance with drawdown conditions and financial covenants; (xiii) decreased rental rates or increased vacancy rates; (xiv) our failure to execute any newly planned capital project successfully or on the anticipated timeline or at the anticipated costs; (xv) difficulties in identifying and completing acquisitions; (xvi) risks related to our development projects (including our Metro Tower development site); (xvii) impact of changes in governmental regulations, tax laws and rates and similar matters; (xviii) our failure to qualify as a REIT; (xix) environmental uncertainties and risks related to climate change, adverse weather conditions, rising sea levels and natural disasters; and (xx) accuracy of our methodologies and estimates regarding ESG metrics and goals, tenant willingness and ability to collaborate in reporting ESG metrics and meeting ESG goals, and impact of governmental regulation on our ESG efforts. For a further discussion of these and other factors that could impact the Company’s future results, see the section entitled “Risk Factors” in the Company’s Annual Report on Form 10-K for the year ended December 31, 2021, and other risks described in documents subsequently filed by the Company from time to time with the Securities and Exchange Commission.

While forward-looking statements reflect our good faith beliefs, they are not guarantees of future performance. You should not rely on them as predictions of future events. We disclaim any obligation to update or revise publicly any forward-looking statement to reflect changes in underlying assumptions, new information, data or methods, future events or other changes after the date of this Sustainability Report, except as required by applicable law.

Third-Party Data Verification

From: Justin Stephens, CodeGreen Solutions
To: Dana Schneider, Empire State Realty Trust
Date: April 13, 2022
RE: Third Party Verification – Limited Assurance

Scope

CodeGreen Solutions has conducted an independent third-party review of Empire State Realty Trust’s (ESRT) 2021 greenhouse gas (GHG) inventory with the intention of providing Limited Assurance of the submission’s accuracy and completeness. The scope of the review includes fuel, district steam and base building electricity, tenant sub-meter and tenant direct-meter electricity and emissions sources, as it applies to the selected reporting boundary of US operations under operational control.

The objective of this Limited Assurance is to confirm data, controls, and processes supporting the Greenhouse Gas (GHG) emission calculations per Empire State Realty Trust’s GHG assertion according to the procedures set out in ISO 14064-3 2019 and GHG Protocol. The goal is to provide Limited Assurance using an independent third-party team within CodeGreen Solutions.

The scope of this verification included verification of 14 properties within ESRT’s operational control. This statement should not be relied upon to detect all errors, omissions, or misstatements that may exist.

Level of Assurance

Level of assurance is used to determine the depth of detail that a Verification Body designs into the Verification Plan to determine if there are material errors, omissions, or misstatements in a company’s GHG assertions. Three levels of review are generally recognized – Reasonable Assurance, Limited Assurance, and Checked Review. CodeGreen’s verification of ESRT’s GHG Emissions Inventory for calendar year 2021 was constructed to provide Limited Assurance.

Roles and Responsibilities

CodeGreen assigned an independent internal team to perform Limited Assurance in accordance with ISO 14064-3 2019 International Standard. The internal team performing this review has not contributed to the compilation of the Empire State Realty Trust’s 2021 performance summary. The verification team was chosen based on their competencies in understanding and calculating organizational greenhouse gas emissions, and in evaluating the effectiveness and accuracy of these statements. The GHG statement presented herein is the responsibility of the verification team.

Additionally, an independent review of the verification plan, activities, and conclusion was performed. The independent review assessed the appropriateness of team competencies, whether the verification plan has been designed properly, whether all verification activities have been completed, significant decisions made during the verification, whether sufficient and appropriate evidence was collected to support the verification opinion, adherence to the ISO 14064-3 (2019) standard, and the final verification opinion.

Methodology

We completed our review in accordance with the ISO 14064 Part 3: Greenhouse Gases: Specification with guidance for the validation and verification of greenhouse gas assertions (ISO, 2019). As such, we planned and performed our work in order to provide Limited Assurance, rather than Reasonable Assurance or Externally Checked Review, with respect to the GHG assertion. We believe our work provides a reasonable basis for our conclusion.

| Data Set | Review Level | Date Range |
|--------------------|-------------------|---------------------------------|
| Energy Consumption | Limited Assurance | Jan 1, 2021 – December 31, 2021 |
| GHG Emissions | Limited Assurance | Jan 1, 2021 – December 31, 2021 |
| Water Consumption | Limited Assurance | Jan 1, 2021 – December 31, 2021 |
| Waste Generation | Limited Assurance | Jan 1, 2021 – December 31, 2021 |

A materiality level of 5% was applied. The processes for performing the Limited Assurance of the submission are described as follows:



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Energy Consumption Data

Energy data is entered into ENERGY STAR Portfolio Manager based on invoices provided directly by the utility, and where applicable, electricity consumption data for the 2021 reporting period was based on Real Time Meter data from revenue grade meters. ESRT elected to utilize a combination of RTM data from a third-party metering vendor to ensure accuracy in reporting. Natural gas, steam, and fuel oil data was calculated directly from utility invoices. Tenant submetered electricity consumption is provided directly by third-party submeter providers. All energy data underwent third-party checks to ensure that data reported is as accurate and complete as reasonable. Based on CodeGreen's Limited Assurance review, there is no evidence indicating that energy data submitted in public disclosures is not accurate and complete.

GHG Emissions Data

CodeGreen has reviewed applicable data and worked with ESRT to prepare a GHG inventory following GHG Protocol Corporate Account and Reporting Standard: Revised Edition guidelines. CodeGreen reviewed energy consumption data utilizing ENERGY STAR Portfolio Manager data and reported tenant sub-meter data to ensure proper allocation of fuel, district steam and base building electricity, tenant submeter and tenant direct-meter emissions across Scope 1, 2, and 3 GHG emissions in alignment with the GHG Protocol. Scope 1 emissions are classified as direct GHG emissions resulting from fuel oil and natural gas. Scope 2 emissions are classified as indirect emissions including electricity and district steam. Scope 3 emissions are classified as indirect emissions resulting from tenant direct and submetered energy consumption. Emissions factors and Global Warming Potentials were also verified. Based on CodeGreen's Limited Assurance review, there is no evidence indicating that GHG data submitted in public disclosures is not accurate and complete.

Water Consumption Data

CodeGreen has reviewed applicable water data in ENERGY STAR Portfolio Manager against utility invoices and worked with ESRT to calculate absolute water consumption data for the portfolio of assets. Based on CodeGreen's Limited Assurance review, there is no evidence indicating that water data submitted in public disclosures is not accurate and complete.

Waste Generation Data

CodeGreen has reviewed applicable waste data in ENERGY STAR Portfolio Manager against Great Forest waste management data exports. Based on CodeGreen's Limited Assurance review, there is no evidence indicating that waste data submitted in public disclosures is not accurate and complete.

Exclusions

CodeGreen has excluded the following energy and water meters from the Limited Assurance review, as utility invoices were unavailable for: Empire State Building Tenant Meters including Walgreens and Starbucks electric.

Summary of Assertion

| Assurance Parameters | Verification Approach |
|--|--|
| Level of Assurance | Limited Assurance |
| Organizational Boundary | Empire State Realty Trust Assets under Operational Control |
| Geographic Boundary | USA |
| Inventory Period | January 1, 2021 – December 31, 2021 |
| Scopes Covered | Natural Gas, Fuel Oil, Whole Building Electricity and Steam, Tenant Sub-metered/Direct Metered Electricity |
| Emissions Covered | CO ₂ , N ₂ O, CH ₄ |
| Protocols used for GHG Data Review | WRI's Greenhouse Gas Protocol |
| Risks Analyzed | Occurrence, Completeness, Accuracy, Cut-Off, Classification |
| Types of Energy Sources Covered (Emissions Activities) | Whole Building and Tenant Sub-metered/Direct Metered Electricity, Natural Gas, Fuel Oil, Steam |
| Types of Water Sources Covered | Whole Building Domestic Water |
| Types of Waste Sources | Whole Building Total Generated Waste, Total Landfilled Waste, Total Recycled Waste |
| Assurance Criteria used for Verification Process | ISO 14064-3: Greenhouse gases -- Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions (2019) |



CODE GREEN

Verification Opinion

Based on our Limited Assurance review of the organizational emission for Empire State Realty Trust from January 1, 2021, to December 31, 2021, nothing has come to our attention which causes us to believe that the energy, GHG emissions, water, and waste used in public disclosures are not presented fairly in accordance with the relevant criteria. The GHG emissions were calculated in a consistent and transparent manner and were found to be a fair and accurate representation of the Empire State Realty Trust's actual usage and were free from material misstatement. CodeGreen has verified a total of:

- 45,231 metric tons of CO₂ equivalent (CO₂e) emissions
- 160,871 MWh of energy consumption
- 297,835 cubic meters of water consumption
- 1,962 tons of waste generation

Based on the processes and procedures conducted, there is no evidence that the GHG statement:

- Is not materially correct
- Is not a fair representation of the GHG data
- Has not been prepared in accordance with the Greenhouse Gas Protocol

Attestation:



Justin Stephens

DevOps Administrator

CODE GREEN

jstephens@codegreensolutions.com



