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ESG OBJECTIVES AND STRATEGY

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It is a pleasure and a privilege for us to share our 2022 Sustainability Report and present another year of achievement, leadership, and commitment to our shareholders, tenants, team, and community.

ESRT's goals are to lease space, sell tickets to the Empire State Building Observatory, maintain our balance sheet, and achieve our sustainability goals...all to build value for investors. Our focus on the creation and preservation of value requires attention to our bottom line through logical, balanced leadership and execution in ESG to deliver on our goals over the near, medium, and long terms.

ESRT continues to lead by example in environmental stewardship and healthy building performance. Everything we do is with focus on bottom line results. We define objectives, determine the economic outcomes, execute, and measure and verify. ESRT has always eschewed soft targets. We received target validation with the Science Based Targets Initiative (SBTi) that our emissions reduction target is aligned with SBTi's most stringent 1.5°C trajectory.

With our expansion into residential property in 2021 and 2022, we begin our work to improve sustainability and environmental performance in a new asset category with the same values and standards to report and disclose transparently. Each decision we confront expands our proven process to make decisions based on data and science and deliver measurable returns on investment (ROI).

As of January 2022, we achieved carbon neutrality across our entire commercial portfolio,¹ an important step toward our ultimate target of net zero emissions at the Empire State Building by 2030 and across our commercial portfolio by 2035. In April 2022, we published the Empire Building Playbook: An Owner's Guide to Low Carbon Retrofits (the Playbook) in partnership with the New York State Energy Research and Development Authority (NYSERDA) and supported by the Clinton Global Initiative.

The Playbook provides a roadmap for building landlords to reduce the carbon emissions of high-rise buildings in alignment with Local Law 97 (LL97) and New York State's Climate Leadership and Community Protection Act (CLCPA) through replication of the technical and economic approaches used at the Empire State Building.

As the first commercial portfolio in the Americas to achieve and maintain the WELL Health-Safety Rating across 100% of our portfolio and one of the first to have our rating renewed twice, we are dedicated to the advancement of scientifically validated approaches to healthy

buildings and indoor environmental quality (IEQ) to boost tenant and employee well-being. We continue to pilot new and innovative IEQ technologies to position our assets to exceed global IEQ health and wellness standards.

We drive inclusion and accountability with safety and respect for every ESRT community member. Our goals for diversity in our workplace and for our suppliers, recognition by the Bloomberg Gender-Equality Index, and commitment to the United Nations Global Compact and Women's Empowerment Principles demonstrate that we can address concerns of today while at the same time maintain accountability for our bottom line. Our corporate and union colleague engagement has never been higher.

Our business environment has not gotten easier. ESRT continues to perform, set new objectives, and achieve them, and do all of this with focus on our goals. We hope you enjoy your read of this report as much as we enjoy the challenge and accomplishment it represents.

Onward and upward.



**Anthony E. Malkin** Chairman, President, and CEO



DRS

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



<sup>&</sup>lt;sup>1</sup> Commercial portfolio includes our office and retail assets, but not our multifamily assets.

# **ESRT Overview**

Empire State Realty Trust, Inc. (NYSE: ESRT) is a real estate investment trust (REIT) that owns and manages office, retail, and multifamily assets in Manhattan and the greater New York metropolitan area. ESRT owns the iconic Empire State Building — the World's Most Famous Building — and the newly reimagined Empire State Building Observatory that was named the #1 attraction in the U.S. and #3 in the world in Tripadvisor's 2022 Travelers' Choice Awards: Best of the Best. As of December 31, 2022, ESRT's portfolio is comprised of approximately 8.9 million rentable square feet of office space, 741,000 rentable square feet of retail space, and 721 residential units across three multifamily properties.

ESRT's sustainability strategy is founded on science-based initiatives to mitigate the environmental impacts of our buildings and the businesses and residents who occupy our office, retail, and multifamily properties. We promote IEQ to support tenant and employee health and well-being. Our efforts and our results enhance our properties' competitive stance in the marketplace and protect and enhance stakeholder value.

Every ESRT investment in our existing portfolio and new acquisitions is made after integrated consideration of how we can achieve measurable gains in energy efficiency, carbon emissions reduction, water efficiency, waste diversion, and healthy buildings.

In execution of our strategy, we emphasize accountability and financial performance as well as attention to the health and well-being of ESRT's employees, tenants, and the communities where we operate.

ESRT is a global leader in energy efficiency and emissions reduction. In partnership with NYSERDA and the Clinton Global Initiative, we have authored The Empire Building Playbook: An Owner's Guide to Decarbonization for existing commercial buildings to develop pathways to carbon reduction with proven returns on investment. We achieved carbon neutrality as of

January 2022 and plan to achieve our ultimate target of net zero emissions by 2030 at the Empire State Building and by 2035 for 100% of our commercial portfolio.

We are a 2022 ENERGY STAR Partner of the Year, and 92% of our NYC portfolio and 80% of our entire portfolio is certified by ENERGY STAR, the national industry standard for energy efficiency. The Global Real Estate Sustainability Benchmark (GRESB) awarded us with a Five Star Rating and an "A" for our ESG disclosure and reporting. ESRT identifies and communicates progress toward our goals in a transparent manner consistent with GRI, SASB, and TCFD governance frameworks. SBTi has validated ESRT's emission reduction targets 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 has earned us the distinction of Fitwel Champion. ESRT partnered with the International WELL Building Institute and the Mayo Clinic and became the first commercial portfolio in the Americas to achieve the WELL Health-Safety Rating across 100% of our commercial portfolio in September 2020 and among the first to be recertified twice. We are an early adopter of the new WELL Equity Rating and have committed to WELL at Scale.

We are a model for the successful implementation of comprehensive, innovative, and effective ESG policies, stakeholder engagement, and transparent reporting.

Our expertise and commitment in these areas enable us to facilitate sustainable and healthy buildings within our portfolio and to share best practices to drive positive change.













**INTRODUCTION** ESG OBJECTIVES AND STRATEGY

ENVIRONMENTAL

SOCIAL



# ESG Highlights, Awards, and Achievements





# INTRODUCED THE EMPIRE BUILDING PLAYBOOK

Owner's Guide to Decarbonization



# **NET ZERO**

BY 2030 FOR EMPIRE STATE BUILDING AND 2035 PORTFOLIO-WIDE



DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Validated emission reduction targets consistent with 1.5°C climate scenario



Awarded Global Listed Sector Leader, Regional Sector Leader, Regional Listed Sector Leader in the Americas









Awarded Fitwel Champion 89% of NYC Portfolio



Better Climate Challenge Partner

In support of

WOMEN'S EMPOWERMENT PRINCIPLES

Established by UN Women and the UN Global Compact Office





INTRODUCTION

# Reporting

ESRT reports in alignment with the UN Sustainable Development Goals (SDGs), The Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB) standards, and the Taskforce on Climate-Related Financial Disclosures (TCFD).



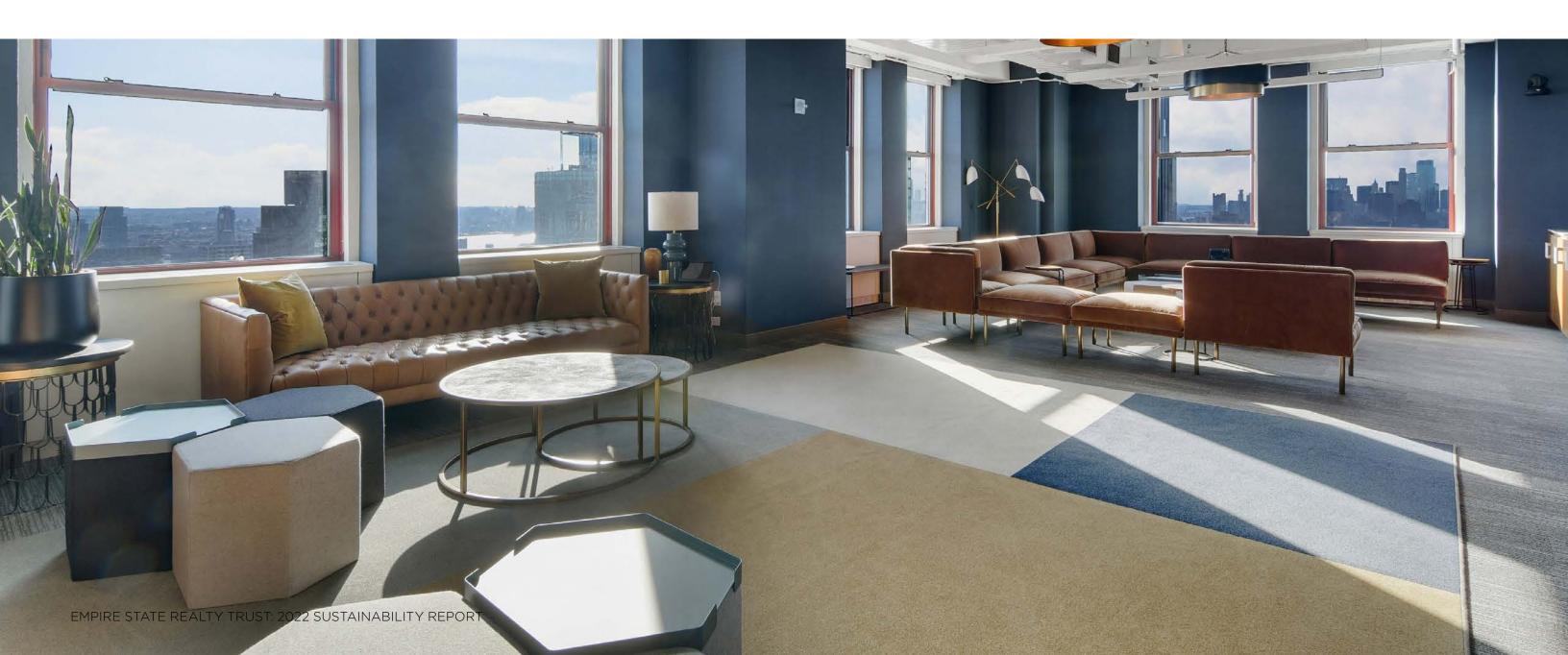












# ESG Objectives and Strategy





# **ESRT ESG Strategies and Components**

#### **CERTIFICATIONS**

We have pioneered practices in energy efficiency retrofits in the existing built environment. Based on our calculations, we anticipate no fines through 2029 for office properties under New York City's LL97. Certifications for our sustainability work include a GRESB Five Star rating, ENERGY STAR Partner of the Year, WELL Health-Safety Rating, and Fitwel Champion. We were selected to receive a \$5 million grant in the first funding round of the Empire Building Challenge and a \$50 million state initiative spearheaded by NYSERDA to reduce greenhouse

# **GOALS & ACCOMPLISHMENTS**

In 2022, ESRT conducted an in-depth goals and targets exercise to ensure that our goals were ambitious and supported by independently verified data. We focused on six categories for our portfolio: greenhouse gas (GHG) emissions, energy, water, waste, IEQ, and green building certifications. To develop and establish these goals, we used 2018 as a baseline year to ensure that our goals met or exceeded our existing commitments, such as NYC Carbon Challenge, U.S. Department of Energy's Better Climate Challenge, and Empire Building Challenge. We also aligned our targets with industry standards and frameworks, including the UN SDGs, where possible.



**ESRT ESG STRATEGIES AND COMPONENTS** 

ESG POLICIES

#### **DISCLOSURE**

ESRT publicly discloses comprehensive details across all aspects of our ESG efforts. This includes transparent communications with our shareholders, tenants, and the public. Our ESG efforts are detailed throughout our investor materials and published online. We report our environmental data according to the World Resources Institute's (WRI) Greenhouse Gas Protocols and leverage rigorous certifications to measure our performance against national and global industry standards and benchmarks.

# **ESG POLICIES**

Our Board of Directors, in coordination with ESRT senior management, oversees the creation of internal and external ESG policies and codes of conduct so that employees, tenants, vendors, investors, and other stakeholders understand how ESG aligns with business practices and implementation and relates to risks and opportunities. Industry frameworks guide our strategy, goals, and evaluation procedures. We carefully develop and continuously refine our policies and standards to guide action and ensure performance and progress against our targeted goals.

# **DATA-DRIVEN PERFORMANCE**

ESRT measures, manages, and evaluates performance against our goals. We use data management platforms, technologies, and third-party verification to provide advanced analytics and insights that 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.

#### **TENANT ENGAGEMENT**

ESRT is an asset to our tenants through space choice and a landlordtenant partnership that produces positive sustainable and economic results. Our hands-on engagement is a differentiator and service to our tenants. We proactively support our tenants to measure, report, and achieve their sustainability targets through ESG data, actionable recommendations for energy reduction, ROI-based design and construction, and an active partnership in their sustainability journey. In addition, we engage with our tenants via quarterly town halls and education sessions focused on sustainability.



# 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 shareholders, tenants, colleagues, and the communities where we live and work. Our sustainability professionals participate in our capital expenditure planning and execution, property management, design, and leasing.

# **CARBON NEUTRAL BUILDINGS**

Through our design standards, operational practices, and targeted decarbonization roadmap, ESRT provides an industryleading standard for decarbonizing the built environment in New York City. ESRT achieved carbon neutrality in 2022 through a combination of (i) reduction of operational emissions through building energy efficiency work, (ii) purchase of wind renewable energy credits (RECs) for 100% of the commercial portfolio's electrical usage, and (iii) offset of 100% of fossil fuel usage with preservation of biodiverse forests. This is just one step in our commitment to our operational net zero target of 80% emissions reduction at the Empire State Building (ESB) by 2030 and the entire commercial portfolio by 2035. As we reduce emissions through our ESRT 2.0 work, we plan to offset our fossil fuel emissions through accredited sources until we reach our

# **RESTORATION AND REUSE**

ESRT retrofits and operates its buildings with environmental impact and resource conservation as a priority to ensure that we operate our buildings efficiently to reduce energy, water consumption, and waste production. ESRT consistently considers embodied carbon in our decarbonization analyses with a focus on modernization of existing buildings to advanced performance levels. This approach also delivers the strongest ROI.

# **HEALTHY BUILDINGS**

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

# **INDOOR ENVIRONMENTAL QUALITY**

Since 2010, ESRT has deployed a leading IEQ program that includes bipolar ionization, MERV 13 filtration, air quality monitoring, CO<sub>2</sub> sensors, and low/ no volatile organic compound (VOC) materials.

# **DIVERSITY, EQUITY, AND INCLUSION**

Through training and development programs, codes of conduct, and transparent practices and policies, ESRT promotes DEI efforts within our company, at our properties, and across our supply chain. ESRT was named a member of the Bloomberg Gender-Equality Index for the second year in a row and became a signatory of the UN Women **Empowerment Principles** in 2022.



# Leadership

ESRT prioritizes thought leadership and explores new tactics and technologies in the real estate market to provide data for decisions and a blueprint for action. We routinely and comprehensively assess progress toward our objectives. We use a variety of sensors, automation platforms, and real-time meter data. Our advanced data management provides a comprehensive understanding of consumption and performance, identifies opportunities

for improvement, and validates effective measures. We utilize our portfolio as a dynamic, living laboratory in which we explore technologies that will propel our industry forward. We manage risk in our portfolio through implementation of physical and operational resilience techniques in each building, and we amplify and distribute that information in an open-source style so that others can benefit from our experience.

# **ESRT Industry Participation**



LL97 Advisory Board and Commercial Buildings Working Group Co-Chair



Board Member and Sustainability Policy Advisory Committee Chair



Sustainability Committee



Tenant Energy Optimization Program



Real Estate Sustainability

Committee







**Board of Directors** 



Steering Committee



Commitment Maker



Judge



DOE's Better Climate Challenge and Better Buildings Initiative





Innovator



Mayor's Sustainability Advisory Board

# **Industry Coordination and Leadership Roles**

ESRT actively engages in a host of industry organizations, working groups, partnerships, and initiatives to gather and share information that will shape ESG-related industry standards and government policy.

ESRT's Chairman, President, and CEO is the Chair of the Real Estate Roundtable's Sustainability Policy Advisory Committee (RER SPAC), has served on the New York City Climate Mobilization Act LL97 Advisory Board, and has co-chaired the Advisory Board's Commercial Buildings Working Group. Our Director and SVP of Energy, Sustainability, and ESG serves on Mayor Eric Adams' New York City Sustainability Advisory Board, the REBNY Sustainability Committee, Nareit Real Estate Sustainability Committee, Urban Green Board of Directors, and RER SPAC and has served a maximum term on the U.S. Green Building Council (USGBC) IEQ Technical Advisory Group and the Leadership in Energy and Environmental Design (LEED) Steering Committee.

Our participation in the NYSERDA Empire Building Challenge, which supports dialogue between real estate, engineering, and technology providers to identify and implement solutions that reduce GHG emissions in high-rise buildings, resulted in the receipt of one of four \$5 million grants to be used toward strategic pilot projects in January 2022. ESRT's pilot projects will focus on building management system (BMS) upgrades and optimization, energy recovery, steam reduction, and partial electrification through water and air source heat pumps and conversion to air source domestic hot water.



These partnerships between technology innovators and the state's real estate leaders will advance scalable decarbonization solutions that reduce emissions from high-rise buildings while growing the clean energy economy.

Doreen M. Harris

NYSERDA President and CEO

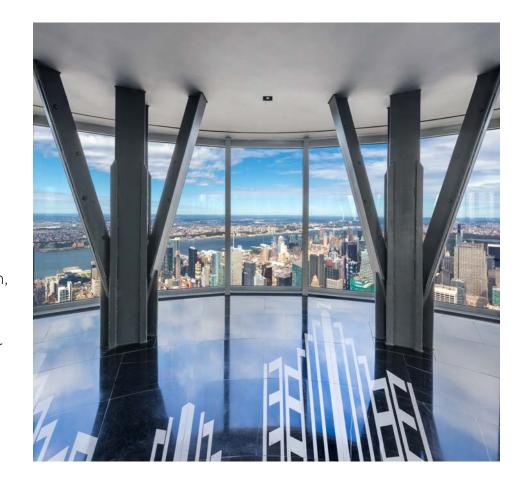


# ESRT Explores New Methods and Improved Technologies

ESRT advances ESG principles through thought leadership, industry cooperation, policy engagement, and collaborative implementation of effective practices that we openly share.

Our real estate portfolio is a dynamic laboratory where we continuously pilot new technologies focused on emissions reduction, energy efficiency, water efficiency, IEQ, health and well-being, and waste reduction. We gather data to perform measurements and verification on these technologies using an array of sensors, meters, and automation platforms installed at our properties. This data, along with input from employees, tenants, and technical experts at ESRT, as well as our trusted partners, informs our analyses and evaluations and, ultimately, our recommendations for continued or expanded use.

To improve our entire industry's ability to successfully implement and measure progress of ESG standards, we share our data and findings via open-source formats. For more details on our groundbreaking ESRT 2.0 Decarbonization Work, click here.





With our foundation in the groundbreaking, deep energy retrofit at the Empire State Building, our mission is to make energy efficiency and decarbonization more affordable and therefore accessible to more businesses that make New York State great.

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



What the Empire State Building did is a blueprint for how we can modernize our buildings, reduce emissions, convert to a carbon-free future, and create new jobs. If we could do the same thing for every sizable building in every city in America, we would probably buy ourselves decades before the worst consequences of climate change come down on us.

#### **Bill Clinton**

42<sup>nd</sup> President of the United States Founder and Board Chair, Clinton Foundation





# Materiality and Stakeholder Engagement

In 2021, we conducted a materiality assessment to inform our ESG strategy and ensure the prioritization of the ESG topics most important to our company and stakeholders. We considered the perspectives and expectations of stakeholders, including tenants, investors, brokers, employees, shareholders, members of our Board of Directors, and industry peers. We consistently monitor and evaluate ESG issues, business needs, and stakeholder expectations. These topics remained relevant to our business and our stakeholders throughout 2022. We plan to conduct materiality assessments every three years to assess and align with shifts in circumstances and stakeholder priorities.

Our board's activities are supported by our senior management team, including our SVP, Director of Energy, Sustainability, and ESG, who provides the board with quarterly ESG updates, and our employee-led Sustainability Committee. ESRT's Sustainability Committee meets quarterly and includes ESRT's Chairman, President, and CEO; Chief Operating Officer (COO) and Chief Financial Officer (CFO); executives for leasing, property construction, and property management; and members of the legal, marketing, and investor relations teams. Actions and strategies approved by the committee are executed by sustainability, engineering, and property management teams across ESRT's portfolio.

We have an employee-led Inclusion committee that works with a third-party consultant, the ESRT human resources, ESG, and legal teams, and others within the company to assess and plan internal DEI training and initiatives.

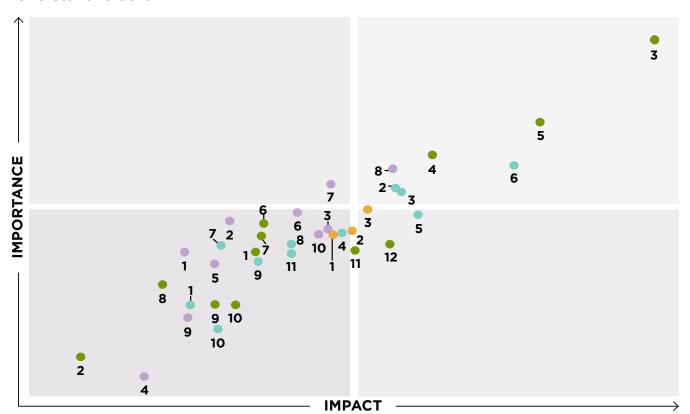
To ensure direct accountability and a continued sustainability focus, we have adopted ESG metrics as part of executive management incentive compensation, both as part of annual bonus and performance-based equity awards.



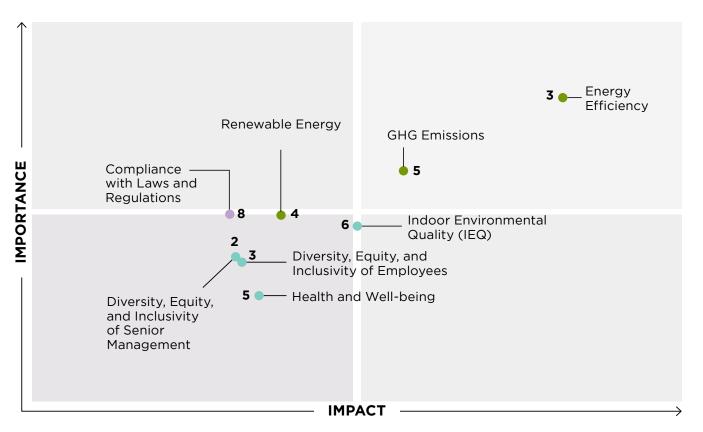
# **OBSERVATIONS FROM 2021 MATERIALITY ASSESSMENT**

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

**ESG OBJECTIVES AND STRATEGY** 



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.



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

#### ENVIRONMENTAL

- 1 Alternative/Mass Transportation
- 2 Biodiversity from Property Operations
- 3 Energy Efficiency
- 4 Renewable Energy
- 5 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 and Well-being
- 6 IEQ
- 7 Human Rights

- 8 Occupational Health and 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



# Alignment with UN Sustainable **Development Goals**

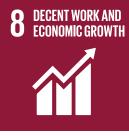
To ensure that our sustainability policies are understood and executed across the portfolio, we train our property managers, ESRT employees, and tenants. Our work is described in our investor presentation materials and regularly updated and available on our website to keep investors and stakeholders informed.

We maintain active contact with federal, state, and city governments, and we share our practices to inform policy. We disclose our efforts to foster awareness of the potential impact on shared goals and objectives.

Our approach is aligned with global frameworks such as the UN SDGs. The SDGs were developed by the United Nations as a framework for addressing global challenges and creating a more sustainable future. Each of our goals and initiatives is designed with the SDGs in mind. The goals denoted in color below are the goals upon which we primarily focus.





































# Quantifiable Improvement



- Achieve net zero GHG emissions across the entire portfolio by 2035 and achieve Empire State Building net zero GHG emissions by 2030
- Meet the Empire Building Challenge and commit to leadership at a statewide level to achieve 80% local emissions reduction by 2035



- 75% waste diversion rate by 2035
- Reduce waste generation by 5% year over year
- Perform waste audits at 100% of buildings annually



- 50% reduction in energy use intensity by 2035
- 20% reduction of energy use intensity at Empire State Building by 2024



• Further improve the IEQ in our buildings to improve efficiencies, tenant safety, and well-being





CLINTON GLOBAL INITIATIVE

ESRT partnered with NYSERDA and the Clinton Global Initiative to drive leadership in action toward climate resilience and a carbon neutral future. The Playbook process sets forth a series of steps that can be achieved with a projected timeline of three to six months:

**Empire Building Playbook** 



- 30% reduction in water usage by 2035
- Reduce water usage 2% year over year
- Implement real-time water metering and software across the portfolio by 2025



- Focus on total employee well-being across physical, mental, and financial dimensions
- Engage and enhance our community through meaningful volunteerism and educational initiatives
- Monitor and enhance supply chain diversity
- Transparency and disclosure of Equal Employment Opportunity Commission (EEOC) diversity data at board, management, and all employee levels and through execution of our strategic DEI plan



GOVERNANCE

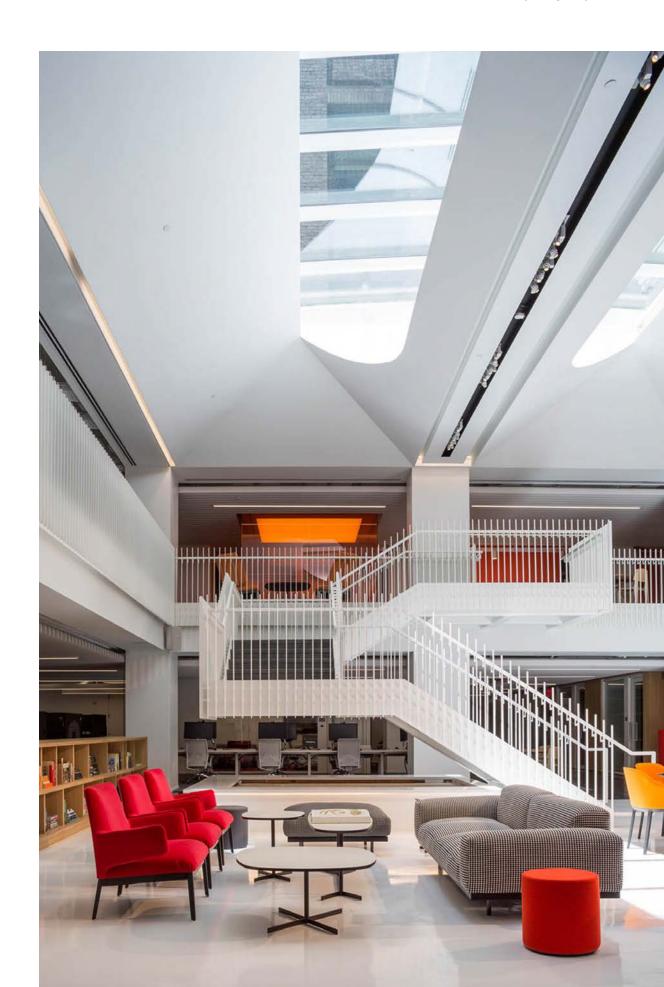


In the United States, buildings currently consume 70% of electricity and account for nearly 40% of GHG emissions. In major cities such as New York City, the built environment accounts for more than 70% of GHG emissions.<sup>2</sup>

At ESRT, we believe in the ability of building performance to drive global and local emissions reduction, improve employee health and productivity, bolster our competitive position, mitigate risk, reduce our stakeholders' exposure to future costs and depreciation of value, and serve as an industry leader in environmental stewardship.

We evaluate current, new, and emerging technologies to optimize performance across our key priority areas and to advance our efforts to reduce energy, GHG emissions, water, and waste and to improve IEQ. Our decarbonization and sustainability programs take embodied carbon into account to strike a balance between optimization, reuse, and lifecycle assessments. Our strategy and implementation of best practices, cuttingedge technologies, and initiatives driven by results position us to set the standard in the built environment. ESRT's work at the forefront of energy efficiency, for the benefit of our tenants and the environment, is recognized worldwide.

# Emissions Emissions Indoor Environmental Quality Energy Waste Green Building Certifications



<sup>&</sup>lt;sup>2</sup> Source: NYC Mayor's Office of Climate and Environmental Justice

# **Net Zero and Carbon Neutrality**

ESRT's definition of net zero for existing buildings is that by extreme reduction of building operational emissions, partnership with a renewably sourced grid aligned with the CLCPA, and strategic offsets of residual emissions through clean energy generation and accredited initiatives, net annual building operational carbon emissions are equal to zero. By 2030 for the Empire State Building and by 2035 for the commercial portfolio, ESRT will target net zero carbon emissions through an 80% operational carbon emissions reduction — to be achieved through a combination of energy efficiency measures and a more renewably sourced grid — and a 20% offset through verified renewable energy and conservation projects. ESRT includes all owned assets and 100% of commercial Scope 1, Scope 2, and Scope 3 downstream leased assets in our net zero goals, projects, data, and disclosure. Scope 3 downstream leased assets are the emissions from the operation of assets that are leased by ESRT and not already included in the scopes 1 and 2 inventories.

Commercial property owners, operators, and tenants must work collaboratively to meet the carbon reduction targets outlined in New York City's LL97. Our research has shown that building interventions, as well as planned major changes in power supply to the grid, are required to meet NYC's and international long-term targets of GHG emissions reduction of 80% by 2050.

Buildings achieve the most significant reductions when energy and emissions reduction measures are implemented at the asset level. Our groundbreaking deep energy retrofit of the Empire State Building, which began in 2010, has reduced GHG emissions by 56% compared to our benchmark year of 2009. This Version 1.0 work was integrated across our entire commercial portfolio and provided the real estate industry with a blueprint of what was then technically and economically possible in the built environment. Since 1.0 implementation, ESRT has achieved 43% reduction in emissions portfolio wide.





ESRT announced in April 2022 an update of our 2010 roll out that outlines further steps beyond deep energy retrofits to net zero carbon emissions in balance with healthy buildings, referred to as ESRT 2.0. In a public-private partnership with NYSERDA and the Clinton Global Initiative, ESRT released the Empire Building Playbook, a free step-by-step guide for existing commercial building owners to develop a pathway to carbon reduction with proven ROI announced by President Clinton, Governor Hochul, and Mayor Adams.

#### **Learn More:**

Empire State Realty Trust Reaches Carbon Neutrality for Commercial Portfolio

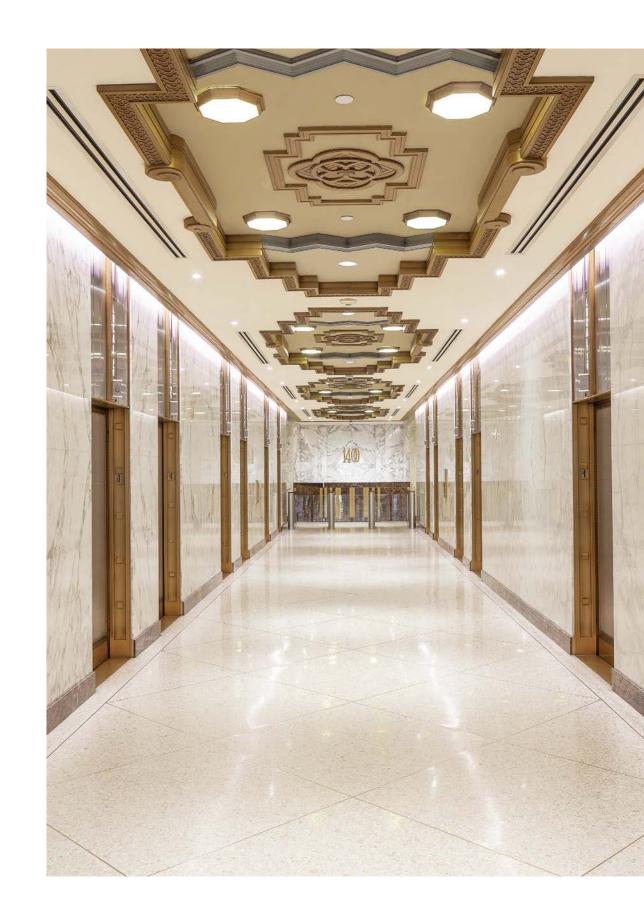


# **GOAL**

# **ESRT Net Zero by 2035**

As we prioritize our efforts to reduce emissions through our building retrofit work, tenant engagement, and sustainability policy efforts, we will offset our fossil fuel emissions through accredited sources until we reach our goal of 80% operational carbon emissions reduction—or net zero. The Empire State Building has been 100% powered by renewable energy since 2011, and as of January 2021, we power 100% of the electricity used in the entire commercial portfolio through clean wind power RECs. ESRT has partnered with 18 Reserves and ACT to offset 100% of commercial non-electric energy consumption through the preservation of approximately 9,000 acres of biodiverse forest ecosystem.

- January 2022: ESRT achieved carbon neutrality
- November 2022: ESRT completed net zero roadmaps and began implementation for 100% of NYC commercial portfolio
- November 2022: SBTi validation of ESRT net zero 1.5°C commitment for carbon emissions reduction





# **ROADMAP TO NET ZERO**

(2007) (2009) (2010) (2012) (2019) (2021) (2022)

#### **SEP 2007**

 Began development of ESB 1.0 deep energy retrofit study

# **APR 2009**

- Announced ESB

   1.0 groundbreaking retrofit and provided the industry with a free open protocol blueprint of what is technically and economically possible
- EnergyPerformanceContract
- 38% energy reduction
- > 3.1 year payback

# **DEC 2009**

- Established baseline for portfolio energy and GHG performance
- Implemented High
   Performance Design and
   Construction Standards,
   requiring all ESRT build outs to be built to and
   perform at the highest
   level of efficiency

# DEC 2009-Present (Ongoing)

- 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 measurement and verification (M&V)
- Pilot new technologies for energy efficiency and emissions reduction

#### JAN 2010 JAN 2012

- Purchased 100% wind RECs for the Empire State Building
- Partnered with the Natural Resources Defense Council 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 in 2010 based on the ESB model. The program was gifted to Urban Land Institute (ULI) to scale.

• Integrated operational

best practices from

standards

ESB 1.0 into portfolio

#### JAN 2019

 Formalized sustainability standard operating procedures for the portfolio

# **OCT 2019**

 Began development of ESRT 2.0 decarbonization roadmap

#### **JAN 2021**

 Offset 100% of the electricity used in the portfolio through clean wind power RECs

# **APR 2021**

- Committed to target net zero emissions for ESB by 2030 and commercial portfolio by 2035
- ESB
   decarbonization
   roadmap study
   completed

# **JAN 2022**

 Achieved carbon neutrality across entire commercial portfolio

# **APR 2022**

- Announced ESRT 2.0
   deep energy retrofit
   study and released
   Empire Building
   Playbook in public private partnership
   with NYSERDA
- Announced community solar contract for a new 3.2 megawatt (MW) solar project, 8.2 MW battery storage system, and 80 electric vehicle (EV) charging stations at 500 Mamaroneck Avenue

# **Environmental Impact Goals and Targets**

In 2022, ESRT conducted an in-depth goals and targets exercise to ensure that our goals were ambitious and supported by independently verified science-based data. We focused on five categories for our portfolio: GHG emissions, energy, water, waste, and health and well-being. ESRT submits to GRESB annually and is globally recognized in reporting, investor, and science-based categories. To develop and establish these goals, we used 2018 as a baseline year and ensured that goals met or exceeded our existing commitments, such as the NYC Carbon Challenge, U.S. Department of Energy's Better Climate and Better Buildings Challenges (including Net Zero Emissions and Net Zero Waste Pilots), and the Empire Building Challenge.

Our targets are aligned with industry standards and frameworks, which includes UN SDGs.



# **SCIENCE BASED TARGETS INITIATIVE**

In 2022, we received target alignment validation from the SBTi, a reporting framework aligned with the latest climate science guidance to meet the goals of the Paris Agreement. ESRT's targeted reduction for GHG emissions supports reduction pathways to limit global temperature rise to 1.5°C, which was validated by accredited global third-party experts. Few real estate companies have made this aggressive commitment. We intend to demonstrate that these ambitious goals are achievable and economically advantageous in our industry.



#### **Climate Action**

Take urgent action to combat climate change and its impacts



- Target net zero GHG emissions across our entire commercial portfolio by 2035 and for ESB by 2030
- Meet the Empire Building Challenge and commit to leadership at a statewide level to achieve 80% local emissions reduction by 2035
- 100% renewable wind RECs for all electricity in commercial portfolio
- 18 Reserves forest preservation offset 100% of steam, natural gas, fuel oil usage for commercial portfolio
- Selected to receive a \$5 million grant in the first funding round of the Empire Building Challenge, a competitive \$50 million state initiative spearheaded by NYSERDA
- Publicly announced our commitment to emissions reduction across our entire commercial portfolio by 2035 and publicly report on progress.
- Converted fuel oil boilers to natural gas by 2020 with only one remaining to be converted before 2023 heating season to reduce significant air emissions such as nitrogen oxides (NO<sub>x</sub>) and sulfur oxides (SO<sub>x</sub>)

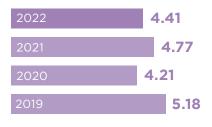
#### **GOAL:**

# **Net Zero**

by 2030 for Empire State Building and by 2035 for the commercial portfolio

# 2022 PROGRESS: ON TRACK

**GREENHOUSE GAS EMISSIONS INTENSITY**<sup>3</sup>
(kgCO<sub>2</sub>e/ft<sup>2</sup>)



<sup>&</sup>lt;sup>3</sup> ESRT commercial occupancy increased 76% over a 5-day average (Monday - Friday) and 86% over a 3-day average (Tuesday - Thursday) in 2022 compared to 2021. The data above represents the commercial portfolio. 2022 is the baseline year for multifamily properties and ESRT will share year-over-year change in next year's report.

INTRODUCTION

**ESG OBJECTIVES AND STRATEGY** 

**ENVIRONMENTAL** 



# **Energy and Atmosphere**

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



#### **Energy Use**

- Target 50% energy use intensity reduction by 2035
- Target 20% energy use intensity reduction at Empire State Building by 2024

# **Energy Efficiency**

 All eligible buildings are ENERGY STAR certified (80% portfolio wide, 92% of commercial portfolio)

#### **GOAL:**

**50%** site energy use reduction by 2035

# 2022 PROGRESS: ON TRACK

ENERGY USE INTENSITY<sup>3</sup> (kBtu/ft<sup>2</sup>)





# **Clean Water and Sanitization**

Ensure availability and sustainable management of water and sanitation for all



#### • Target 30% water usage reduction by 2035

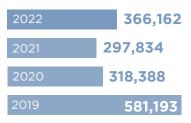
- Target 2% water usage reduction each year
- Implemented real-time water metering and machine learning software across the commercial portfolio in 2022

#### GOAL:

**30%** reduction in water intensity by 2035

# 2022 PROGRESS: ON TRACK

WATER<sup>3</sup> (m<sup>3</sup>)





# **Responsible Consumption and Production**

Ensure sustainable consumption and production patterns



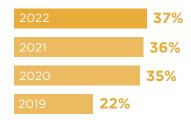
- Target 75% waste diversion rate by 2035
- Target 50% waste diversion rate by 2025
- Target 5% waste generation reduction annually
- Perform waste audits at 100% of our commercial buildings annually

#### GOAL:

75% waste diversion rate by 2035

# **2022 PROGRESS:** ON TRACK

WASTE DIVERSION<sup>3</sup>



<sup>&</sup>lt;sup>3</sup> ESRT commercial occupancy increased 76% over a 5-day average (Monday - Friday) and 86% over a 3-day average (Tuesday - Thursday) in 2022 compared to 2021. This occupancy increase contributes to increased usage. The data above represents the commercial portfolio. 2022 is the baseline year for multifamily properties and ESRT will share year-over-year change in next year's report.



INTRODUCTION



#### **Health and Well-being**

Ensure healthy lives and promote well-being for all at all ages



- WELL Health-Safety for 100% of portfolio annually
- Perform comprehensive annual indoor air and water quality tests at all properties
- Install MERV 13 filters and ASHRAE 62.1 ventilation in all facilities where possible
- Comprehensive industry-leading High Performance Sustainability Guidelines
- Achieved Fitwel Champion; covers 89% of our Manhattan portfolio
- Committed to WELL at Scale

**GOAL:** 

100%

Properties WELL Health-Safety Rating

**GOAL:** 

**75**%

Portfolio square footage Fitwel certified by 2025 2022 PROGRESS:

MET

100%

Properties WELL Health-Safety Rating

2022 PROGRESS: ON TRACK

710/

**71**%

Portfolio square footage Fitwel certified

# NYC SUSTAINABILITY ADVISORY BOARD

In December 2022, ESRT's SVP, Director of Energy and Sustainability, Dana Robbins Schneider, was appointed to the New York City's Sustainability Advisory Board. The board is made up of 24 members who will advise the city on a range of potential climate initiatives, including energy, transportation, waste management, and expanding New York City's green space, among other areas of importance. ESRT is the only REIT represented on the board. I look forward to sharing the expertise I have been privileged to gain in over 20 years in this field to drive continued partnership and effective policy, informed by successful practice, to deliver on Mayor Adams' vision for a net zero New York City," Dana said of her appointment. "We will prove the technical and economic case for decarbonization while also delivering a healthy and equitable built environment, innovation, and job creation for all New Yorkers."

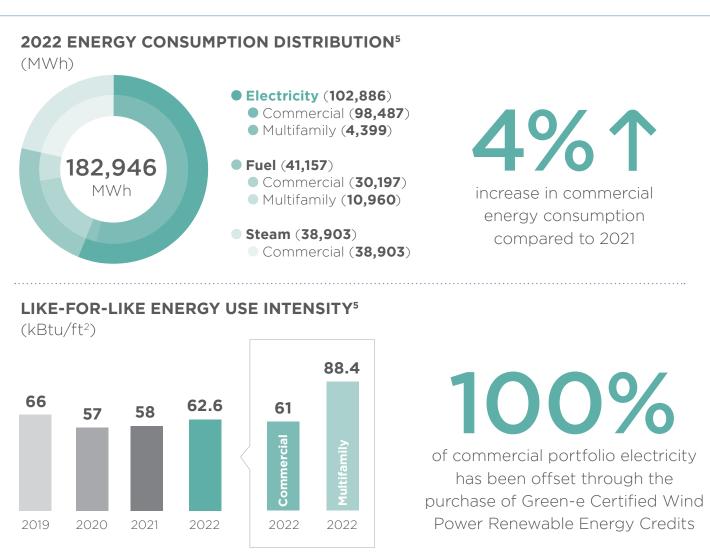


<sup>4</sup> https://www.nyc.gov/office-of-the-mayor/news/895-22/mayor-adams-appoints-26-members-sustainability-advisory-board

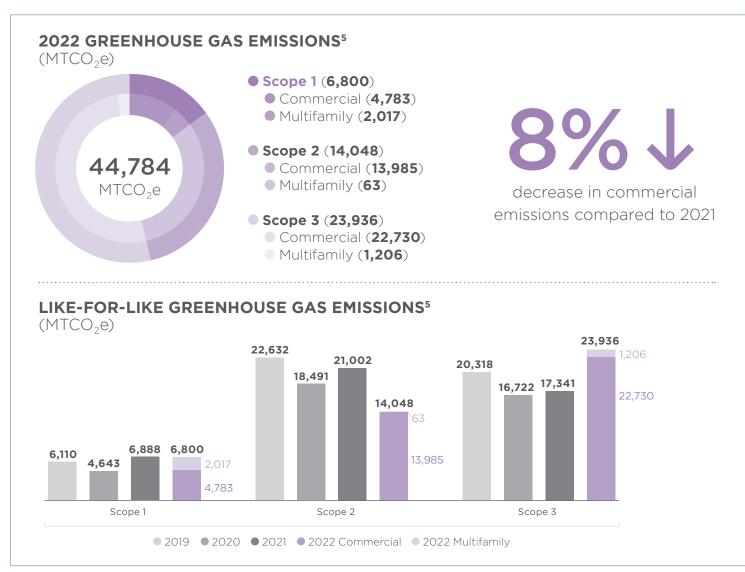
# **Environmental Performance**

Empire State Realty Trust discloses key environmental performance metrics across energy, GHG emissions, water, and waste to track, evaluate, and improve performance. We disclose environmental performance data for all properties where ESRT is the owner. The reporting boundary includes 21 properties owned and controlled by ESRT as of December 31, 2022. We include all properties owned by ESRT and we include all known Scope 1, Scope 2, and Scope 3 downstream leased assets energy, utility, and emissions data in these disclosures. GHG emissions were calculated in accordance with the 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.

# **ENERGY PERFORMANCE**



# **GREENHOUSE GAS EMISSIONS PERFORMANCE**

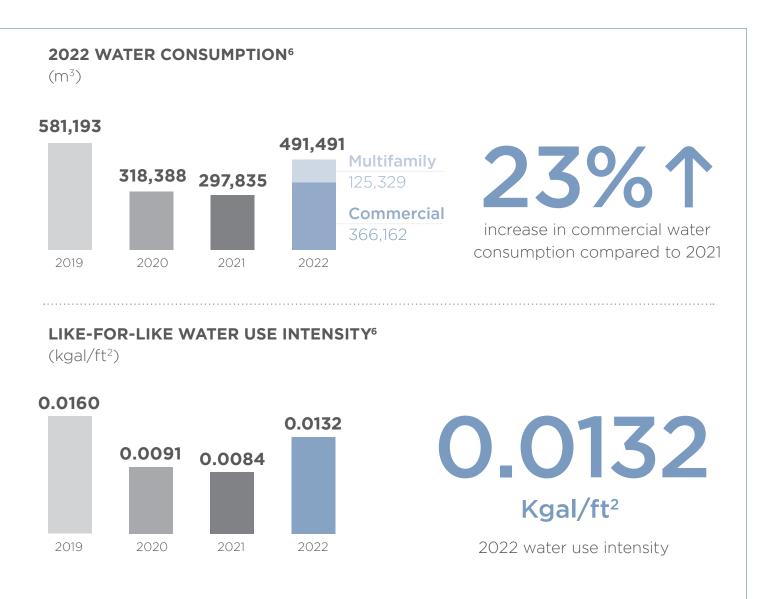


ESRT commercial office occupancy increased 76% over a 5-day average (Monday - Friday) and 86% over a 3-day average (Tuesday - Thursday) in 2022 compared to 2021. This occupancy increased energy usage and emissions.

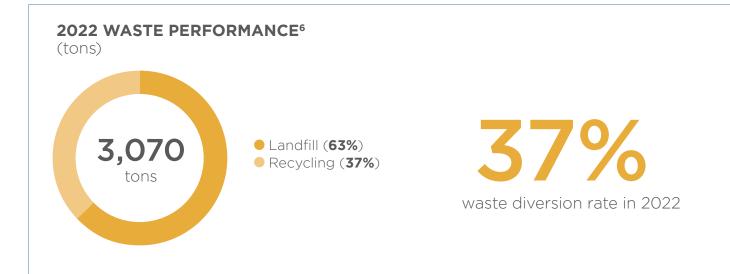
In April 2022, ESRT transferred back to the lender in a consensual foreclosure, a high-rise office building in Norwalk, CT and in December 2021, acquired two high-rise multifamily buildings in New York, NY. These portfolio changes and property type differences contribute to changes in utility trends, specifically an increase in natural gas usage, attributable to the multifamily properties, and increased emissions. 2022 is the baseline year for multifamily properties and ESRT will share year-over-year comparisons in the 2023 Sustainability Report.

Data is not normalized to weather, occupancy, or other variables which impact usage and are not based on the impacts of efficiency efforts. Heating Degree Days (HDD) increased 6% in 2022 compared to 2021 and Cooling Degree Days (CDD) increased 5% in 2022 compared to 2021. These differences in weather and occupancy contribute to increased usage and emissions.

# WATER PERFORMANCE



# **WASTE PERFORMANCE**





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.

During April 2022, ESRT transferred back to the lender in a consensual foreclosure, a high-rise office building in Norwalk, CT and in December 2021, acquired two high-rise multifamily buildings in Manhattan. These portfolio changes and property type differences contribute to changes in usage.

Data is not normalized to weather, occupancy, or other variables which impact usage and are not based on the impacts of efficiency efforts. Heating Degree Days (HDD) increased 6% in 2022 compared to 2021 and Cooling Degree Days (CDD) increased 5% in 2022 compared to 2021. These differences in weather and occupancy contribute to increased usage in 2022 as compared to 2021.

2022 is the baseline year for multifamily properties and ESRT will share year-over-year comparisons in the 2023 Sustainability Report. The data within this report represents two multifamily properties, 345 E. 94th St and 561 10th Ave, comprised of 625 residential units. 298 Mulberry St acquisition closed on December 20, 2022 and therefore is not included in 2022 data.

The waste data above represents the commercial portfolio.

<sup>&</sup>lt;sup>6</sup> ESRT commercial office occupancy increased 76% over a 5-day average (Monday - Friday) and 86% over a 3-day average (Tuesday - Thursday) in 2022 compared to 2021. This occupancy increase contributes to increased water usage and waste generation.

# Sustainability Guidelines and Policies

Our initiatives and associated processes set forth our steps to meet our sustainability goals. We have developed stringent and comprehensive Sustainability Policies and Procedures, High-Performance Sustainable Healthy Design and Construction Guidelines for tenant fit-outs and a Vendor Code of Conduct to ensure that our supply chain, from service providers to purchased goods, are held to the highest standards of ethics and sustainability performance.

In 2022, we updated our Guidelines to reflect our ESRT 2.0 decarbonization initiatives and our Sustainability Policies and Procedures. These updates reflect our advances toward our net zero commitment and include specific residential guidelines for our recently acquired multifamily properties. Our Vendor Code of Conduct was updated to enhance DEI and global ethics and supply chain alignment.

We utilize our comprehensive approach to sustainability and ESG whenever we evaluate potential acquisitions. We implement our program of decarbonization goals, healthy spaces in which to live and work, 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 Quantity and Quality Management
- Waste Management
- Vendor Code of Conduct
- Climate Change Adaptation and Resilience

- IFQ
- Indoor Air Quality (IAQ) Monitoring
- Tobacco-free and Smoke-free Environment
- Low VOC Emitting Materials
- Green Cleaning
- Integrated Pest Management
- 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 cost assessments 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 WRI GHG Protocol. We utilize software platforms that produce key insights and analytics of BMS data to provide Real Time Energy Management (RTEM) analytics, platforms for automated interval level meter data, and tenant payment capabilities. It also provides real-time metering for real-time energy consumption, demand response software programs with real-time peak load management, and energy and water consumption across the portfolio for ENERGY STAR Portfolio Manager.

# **ENVIRONMENTAL MANAGEMENT SYSTEM**

We use an Environmental Management System (EMS) to formalize our sustainability strategy. We align with ISO 14001: 2015 international standard and ISO 50001 for our environmental and energy management systems.

# **PLAN**

# DO

# **CHECK**

# **ACT**

- Establish goals and targets
- Develop sustainability guidelines (standard operations procedures)
- Identify roles and responsibilities
- Educate and engage employees and tenants
- Implement innovative technology
- Undertake projects
- Track and monitor performance-real time energy management, benchmark in ENERGY STAR Portfolio Manager
- Conduct energy, waste, water, lighting, and controls
- Implement efficiency measures

- Evaluate performance
- Continuous improvement
- > Annual sustainability program review
- > Report—GRESB, SBTi, and annual Sustainability Report
- > ENERGY STAR Partner of the Year. 92% NYC portfolio and 80% of entire portfolio ENERGY STAR certified. 100% WELL Health-Safety Rating





ESG OBJECTIVES AND STRATEGY

**ENVIRONMENTAL** 

SOCIAL



We focus our efforts on ROI-driven energy efficiency strategies, cutting-edge technology, and advanced analytics to achieve portfoliowide quantifiable performance improvements.

Our holistic energy efficiency approach is as follows:

In 2022, ESRT is the first company to be awarded the new NYSERDA RTEM for its leading programs to partner with tenants to reduce and manage energy usage.

# MONITOR ENERGY CONSUMPTION

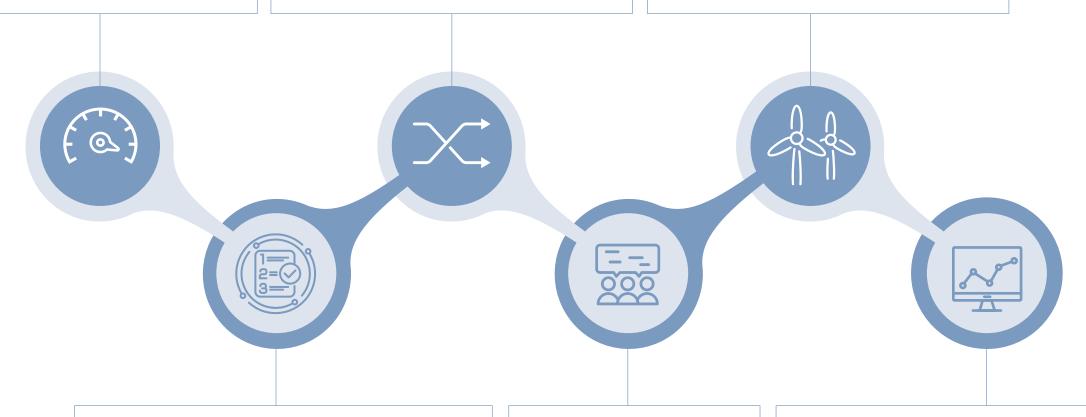
We leverage advanced analytics for energy and emissions performance in real time and track energy data in ENERGY STAR Portfolio Manager to understand performance. 100% of our electric usage comes from the grid.

# REDUCE PEAK DEMAND AND IMPROVE GRID RESILIENCE

Demand Response programs reduce our energy consumption, costs, and emissions and alleviate pressure on our electric grid to prevent blackouts and brownouts and minimize the use of inefficient peaker plants. 100% of our commercial properties in the NY region participate in Demand Response and demand management programs.

#### RENEWABLE ENERGY

We offset our emissions through Green-e certified RECs. Since January 1, 2011, the Empire State Building has purchased over 41,000 MWh of RECs to offset 100% of the electricity used in the building and nearly 17,000 MTCO<sub>2</sub>e. As of January 1, 2021, we offset 100% of the electricity used in our commercial portfolio through clean renewable wind power RECs.



#### **EVALUATE PERFORMANCE**

We perform energy audits and perform continuous retrocommissioning and measurement and verification to monitor and trend the performance of our energy and emissions reduction measures. 100% of our commercial properties have conducted energy audits in the last three years, and our energy audits exceed the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Level 4 guidelines as they are the basis of our ESRT 2.0 Decarbonization Roadmaps for each building.

#### **TENANT ENGAGEMENT**

We partner with our tenants to educate and collaborate with them to drive ROI-based energy efficiency initiatives and sustainability practices.

# REAL TIME ENERGY MANAGEMENT

Real-time energy consumption feedback allows us to realize cost and energy savings opportunities. We partner with NYSERDA to implement RTEM incentives for controls upgrades, chiller plant optimization, tenant energy management, tenant air handling units, lighting controls, plug load monitoring and controls, and ongoing services that use predictive analysis and diagnostics.







We perform energy audits on a regular basis (at a minimum every three years), procure RECs to offset emissions from electricity consumption, offset fossil fuel usage from forest preservation, and partner with policymakers at the city, state, and federal levels to drive a renewable and resilient grid. Our plan to accomplish our 2035 net zero goal is to continue to implement these measures, perform evaluations of emerging technologies, and scope opportunities for on-site or community-based renewable energy generation and storage where viable. Our commitment to reduce energy consumption in the buildings by 50% from non-renewable sources combined with CLCPA renewable energy sources contribute to our plan to achieve net zero emissions across our portfolio.

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:



#### **NEW YORK CITY**

- NYC'S Green Code Task Force (for the development of PlaNYC, LL84, LL87, etc.)
- 80x50 Technical Working Group
- NYC Mayor's Carbon Challenge includes the updated, more stringent program launched in 2022
- Climate Mobilization Act LL97 Advisory Board
- NYSERDA Empire Building Challenge
- NYC Sustainability Advisory Board appointment December 2022



#### **FEDERAL**

• DOE's Better Buildings Challenge and Better Climate Challenge and Net Zero Emissions and Net Zero Waste Pilots



We implement RTEM, conduct 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 eight million square feet of our portfolio in its Demand Response programs. With demand management, we reduce our assets' electricity usage through peak periods, reduce stress on the grid, and help prevent disruptions to service such as brownouts and blackouts. All assets have access to a real-time meter data (RTM) tool designed for proactive demand management during demand response events.





The reduction of water consumption in buildings reduces overall environmental impact, drives operational cost savings, and reduces risk from fluctuations in water supply. Water usage reduction and water runoff quality and quantity management are critical issues for NYC and for ESRT as a recipient of the municipal water supply. We address each of these through water processing, water fixtures, green roofs, and native xeriscape planting.

To implement our Water Management Policy and 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 toward performance goals
- Keep water data updated in ENERGY STAR Portfolio Manager
- Fix identified leaks
- Continue to research, pilot, and implement strategic water management technologies and strategies in base building and tenant spaces
- Ensure best practices for water conservation

- Engage and educate tenants on opportunities for specifications and behaviors to drive water efficiency
- Install or retrofit existing fixtures for ultra-lowflow models where possible and in every retrofit
- Implemented WINT water submetering and real-time monitoring, machine learning, and management software across the entire commercial portfolio as of 2022



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, software, and pilot technology along with advanced water quality monitoring and testing.



# LOW-FLOW RETROFITS AND UPGRADES

As part of our standards, we continue to implement ultra-low-flow fixtures that perform approximately 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 systems. We track progress from water efficiency upgrades, identify leaks from specific systems, and identify opportunities to increase water efficiency.



# ADVANCED SOFTWARE-BASED WATER USE MONITORING

We have implemented machine learning artificial intelligence-based software to detect and mitigate unnecessary water usage and leaks, monitor water use, and analyze water use trends for all major systems across our commercial portfolio. This technology enables our property managers and engineers to expertly manage water consumption and make informed operational decisions in real time. As of 2022, 100% our commercial portfolio has implemented this smart technology. We plan to extend implementation of this technology across our multifamily portfolio to further reduce process water usage over the next year.





We commit to minimize waste generated at our properties through waste reduction, recycling, composting, donation, and other initiatives to divert waste from landfills. Our 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 our assets and loading docks and comply with applicable local codes and regulations. The installation of waste decals from the Business Integrity Commission 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 that 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 collected and diverted in accordance with our guidelines.

- We perform quarterly waste audits at 100% of our commercial buildings to understand waste performance and identify opportunities for improvement.
- We implemented pilot compost programs with some of our largest tenants and offer furniture reuse and donation programs, and electronic waste collection opportunities to all.
- We introduced a waste management pilot program at 111 West 33<sup>rd</sup>, the Empire State Building, and One Grand Central Place, which:
- Scores tenant waste infrastructure (DSNY LL87 compliance, points of waste generation, source separation of materials, contamination, additional waste reduction, and diversion opportunities)
- > Reviews scores with tenants and use the waste audit findings to recommend program adjustments, inform educational materials, and drive implementation
- We hold monthly meetings to review findings, answer questions, and drive change
- We host quarterly town hall meetings to improve program compliance
- We introduced a program to help measure real-time data management of waste which uses scales to help track diversion and drive implementation of proper waste disposal
- We align with LEED Existing Buildings: Operations and Maintenance

# **WASTE INITIATIVES**

# **Quarterly Waste Audits**

We partner with Great Forest to complete waste audits to verify and understand the waste performance at our buildings and identify opportunities to increase diversion rates.

# **Tenant Engagement** and Education

We provide education on waste management and recycling practices to ensure that our tenants are equipped with the knowledge to reduce waste. Some tenants that participated in the education programs in the past year are is LinkedIn, JCDecaux, iCapital, and COTY.



# Monthly Waste Data and Diversion Rate

Quarterly, we provide tenants with monthly waste data and diversion rates.

# Tenant Pilot Waste Management Programs

We partner with tenants to deploy waste management and composting programs to reduce the amount of landfill waste and food waste. We performed pilots in three commercial buildings in 2022 and received participation from LinkedIn, JCDecaux, COTY, Clearview Healthcare Partners, iCapital, and more.

# **Building Staff Engagement**

Our building staff annually receives training on proper waste management to ensure that waste and recycling is handled correctly from start to finish.



# **Biodiversity**

ESRT is committed to protect and enhance biodiversity during the operation of our existing buildings. ESRT values preservation. Our portfolio illustrates the principle that the greenest building is the one that already exists. We believe that biodiversity can be prioritized with a positive impact in urban environments and contribute to urban revitalization. We focus on preservation and restoration, which is aligned with our commitment to preserve and respect natural resources. We have begun our alignment with the Taskforce on Nature-related Financial Disclosures.

#### **BEEHIVES**

ESRT added four bee apiaries to our portfolio in 2022, housing around 200,000 honeybees. Honeybees are vital parts of our ecosystem and they are in serious decline. Managed honeybee colonies in the U.S. have declined from six million colonies in 1947 to under two and a half million today.<sup>7</sup> At ESRT, we believe we can do our part to help honeybee populations recover. Each apiary produces around 100 jars of honey each harvest season that we share with our tenants and employees.

# **LANDSCAPING**

ESRT has several green roofs and rooftop gardens within our portfolio. All new landscaping is required to be native, adaptive plants that are insect- and disease-resistant. We use organic and natural materials whenever feasible.

#### INTEGRATED PEST MANAGEMENT

To minimize pest infestations and exposure to pesticides to our people, animals, and plants, we have an integrated pest management program that can be found in our <u>Sustainability Guidelines</u>, which all building staff and third-party vendors must follow. These stringent guidelines include procedures involving monitoring and reporting, communication, environmental control, documentation, and preventative pest management best practices.



<sup>&</sup>lt;sup>7</sup> https://www.usda.gov/media/blog/2017/06/20/being-serious-about-saving-bees

# High-Performance Healthy Buildings

On average, Americans spend close to 90% of their time indoors.<sup>8</sup> With that in mind, ESRT provides tenants with thoughtfully designed work environments focused on the health and wellbeing of the people who occupy our buildings every day. Healthy buildings are where we can work together and collaborate to help 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, which is in alignment with the WELL Health-Safety Rating (100% of portfolio certified), Fitwel Certification (89% of NYC portfolio certified), and industry-leading best practice. These strategies are illustrated in the figure to the right.

# **Indoor Environmental Quality**

For more than a decade, IEQ improvement has been a key tenet of our sustainability strategy. Our industry-leading, comprehensive, state-of-the-art program focuses on operational best practices to ensure healthy and productive spaces that include MERV 13 filters, bipolar ionization air purification technology, indoor air quality (IAQ) and water quality tests, CO<sub>2</sub> sensors, green cleaning practices, integrated pest management strategies, and low-emitting materials.

ESRT was the first commercial portfolio in the Americas to achieve the WELL Health-Safety Rating and among the first to be certified three times. 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. 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.



# HEALTHY BUILDING MEASURES

# **Human Experience**

- CO<sub>2</sub>-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 bipolar 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**

 $\Diamond$ 

- Space-specific 24/7 HVAC
- MERV 13 filters that 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

<sup>8 &</sup>quot;Indoor Air Quality ." EPA, Environmental Protection Agency





**ESRT enrolled in WELL at Scale in November 2022**, to demonstrate our leadership and dedication to IEQ across our entire portfolio. ESRT is the first REIT to recertify WELL Health-Safety three times and is an early adopter of the WELL Equity Rating. Under WELL at Scale, ESRT will be able to receive benchmarking of performance, achieve WELL Certification and WELL ratings and obtain a WELL Score. The participation of WELL at Scale will drive our leadership further in IEQ. For the past decade, ESRT has focused on health and well-being and pioneered and showcased many sustainability practices through our renovations at the Empire State Building — practices we subsequently rolled out throughout our entire commercial portfolio. ESRT believes in the power of building performance to improve employee productivity and well-being.

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 to deliver positive 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.

Bipolar ionization air purification is installed in over three million square feet of office space across our portfolio. This technology syncs the ionization technologies with a building's IT infrastructure, provides encrypted data, notifications, and reports through self-calibrating sensors that monitor for chemical and biological contaminants.

#### **IEQ DURING CONSTRUCTION**

ESRT design and construction of new spaces and renovations represent significant opportunities to drive energy efficiency, sustainability, and healthy environments. ESRT has implemented rigorous standards for sustainability and IEQ during construction of base building and tenant projects, as outlined in our High Performance Sustainable Healthy Design and Construction Guidelines and Sustainability Guidelines. These include all of our IEQ policies, plans, and standards in alignment with the most advanced national and international standards, including LEED v4.1, WELL v2, and WELL Health-Safety.



# **Construction Indoor Air Quality Management Plan**

 In alignment with LEED v4.1, WELL v2, Sheet Metal and Air Conditioning National Contractors Association recommendations



# **HVAC** equipment and pressurization protection

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



#### **Source Control**

- Use low or no VOC and no Red List products, Health Product Declarations (HPD) and Environmental Product Declaration (EPD) whenever possible
- Prohibit use of gasoline or diesel equipment whenever possible
- Prohibit smoking and vaping
- Protect absorptive materials from moisture damage



# **Pathway Interruption**

• Ensure walk-off mats are installed as appropriate



# Housekeeping

- Institute cleaning activities concentrated on HVAC equipment and building equipment to remove contaminants prior to occupancy
- Use green cleaning and pollution mitigation practices



# **Monitoring**

 Have general contractor document adherence to IEQ plan through weekly reports and on-site inspections



# Flush-out and/or air tests

 Conduct a flush-out or air test at owner's discretion if all measures have been consistently adhered to and documented; otherwise, a flush-out or air test is required prior to occupancy

## **Tech and Innovation**

In alignment with our approach to strategically evaluate and leverage innovative technologies, ESRT continually tests, vets, and implements IEQ, energy efficiency, and emissions reduction strategies and technologies across our portfolio.

In addition to the technological standards we implement throughout our portfolio, we pilot new and emerging technologies, such as these pilots at the Empire State Building in 2022:

- Photovoltaic (PV) glass windows to convert light to electricity without optical properties being compromised
- Real-time air quality monitors, trends, reports, software, and hardware
- > Collects air quality data to measure pollutants (such as CO, PM 2.5, CO<sub>2</sub>, temperature, humidity and VOCs) around the clock. These data measurements can initiate action with connected devices and systems to improve indoor air quality, thermal comfort, and energy efficiency.
- Smart building automation that translates real-time data to affect operational, sustainability, and compliance objectives

- Circadian rhythm LED lighting retrofits to improve IEQ and lower lighting energy usage
- Plug load management software and hardware
- Waste management software and hardware to improve waste diversion rates
- Controls updates to advanced ASHRAE High Performance Guideline 36
- Software and controls integration for enhanced integration of tenant systems into advanced building controls
- RTEM, hardware, software, and controls partnerships with tenants to optimize data center and server energy usage



# Tenant Engagement

Our tenants are critical to the success of our sustainability program, policy implementation, asset performance, and sustainability strategies throughout our portfolio. Tenants' energy and water consumption, waste production, and related behaviors have a significant impact on the building's overall performance and our sustainability goals. We proactively engage with our tenants to align with our ESG objectives and provide them with assistance to measure, report, and achieve their ESG goals. We assist tenants in their sustainability journey through collaboration and exchange of ESG data, actionable recommendations for reductions, IEQ assistance, waste management, ROI-based design and construction energy efficiency support, and an active landlord partnership.

## **Program Overview**

Our partnership with our tenants goes beyond traditional engagement. We work with tenants at every stage of the relationship to integrate priorities and customize initiatives that support their sustainability and ESG goals that drive building performance. Our tenant engagement begins with the inclusion of a suite of sustainability provisions in all our leases. Our lease requirements promote collaboration to achieve efficiency and include 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 offer hands-on sustainability expertise.

## **Green Leasing**

Our leasing team effectively integrates best practices, efficiency, and IEQ measures with modern design elements through communication of the unique sustainability features included in our state-of-the-art pre built spaces. ESRT leases are designed with green lease clauses, which contribute to our repeated Green Lease Leader Platinum recognition. Green leases include criteria for transparent energy, water, waste, and emissions data to be tracked and reported, broker training, submetering, and tenant fit-out requirements.

## **Design and Construction**

We review all architectural and mechanical drawings for tenants to ensure compliance with lease requirements and alignment with High Performance Sustainable Healthy Design and Construction Guidelines. The guidelines include energy efficiency and IEQ strategies that have resulted in 20%–57% modeled energy savings with a payback period of 1.8-4.6 years. Our evaluation and assessment of the strategies we implement at each asset results in increased tenant satisfaction and well-being, a strong ROI for our investors, and meaningful, rewarding work for our employees.





Achieved Green Lease Leader
Platinum recognition in 2022, the
highest recognition 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 commercial portfolio.



## **Operations and Engagement**

ESRT tenants receive sustainability and ESG education and support for custom tenant energy efficiency programs. From tenant sustainability walk-throughs to green cleaning protocols and our integrated pest management, ESRT building services follow best practices to identify sustainability and ESG opportunities. We proactively support our tenants to measure, report, and achieve their sustainability targets through ESG data, actionable recommendations for energy reduction, ROI-based design and construction, and an active partnership in their sustainability journey.

We provide tenants with Sustainability Guidelines and fact sheets and maintain frequent, consistent communications through email, in-person meetings, and social media. Educational town halls and custom tenant groups led by our SVP, Director of Energy, Sustainability, and ESG cover all aspects of our holistic sustainability and ESG program for building occupants.

Landlord-tenant collaboration is integral to the success of our sustainability and ESG program goals. We continue to strengthen this partnership with all tenants as we work toward a green future together.

## **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 toward our intensive long-term goals. We developed our High Performance Sustainable Healthy Design and Construction Guidelines, which 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 energy efficiency programs for tenant participation listed below.

### NYSERDA Commercial Tenant Program

Provides financial support to engage 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 well-being and comfort.

## NYSERDA Real Time Energy Management (RTEM)

NYSERDA'S RTEM Tenants
Program encourages building
owners to monitor and manage
commercial office buildings'
energy, electricity demand,
and carbon footprint that
covers the core building areas,
shared common spaces, and
tenant spaces.

## **ENERGY STAR for Tenant Spaces**

Demonstrates tenants' commitment to energy efficiency through estimation of energy use, metering energy use, efficient lighting use and equipment, and shared 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**

Integrates energy efficiency into tenant space design and construction and delivers financial returns through energy conservation. Our Chairman, President, and CEO arranged the private funds and creation of this program at the Natural Resources Defense Council and the transfer of the program to the Urban Land Institute.





## **ESRT Version 2.0**

## Introduction

Since March 2020, in partnership with NYSERDA and supported by the Clinton Global Initiative, ESRT co-developed the Empire Building Playbook: An Owner's Guide to Low Carbon Retrofits, which was released in April 2022.

The Playbook provides replicable technical and economic approaches to reduce the carbon emissions of high-rise buildings and support energy and emissions reduction efforts within the industry with proven ROI. It details ESRT's retrofit experience at the Empire State Building, 1333 Broadway, 1350 Broadway, 1359 Broadway, and 250 West 57<sup>th</sup> Street, which includes input from experts and engineers and provides practical step-by-step guidance for all owners of large commercial buildings. In 2022, ESRT completed net zero studies for 100% of its NYC commercial portfolio. These case studies will be added to the Empire Building Playbook in 2023. The Playbook will continue to be updated with additional case studies, technologies, and best practices and is available online at nyserda.ny.gov/ebcplaybook.

ESRT began analysis for expansion of this Playbook to include technical and economic pathways to decarbonization of multifamily buildings in January 2023 based on the blueprint we created for ESRT 2.0. We intend to share these case studies and this multifamily Playbook openly in partnership with NYSERDA in 2023. ESRT will also complete net zero studies for our Connecticut commercial portfolio in 2023.

New York State and New York City have passed legislation that commits the grid and the built environment to a net zero 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 ESRT 2.0 team's work.

## **Version 2.0 Playbook**

The Playbook 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.

The Playbook is a free and open resource for building owners, operators, brokers, and design and engineering teams who want to capture the economic benefits of energy efficiency and decarbonize the operations of their buildings. It 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 costeffective carbon reduction and includes the following actions:

- 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 evolved thermal and electric grid; integrate projected energy and maintenance reductions, avoided fines and risk (such as LL97 fines), incentives, and refined capital and implementation costs.



## **Version 2.0 Team**

## **BURO HAPPOLD**

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, it leads analysis, design, innovation, technical knowledge management, and reporting.



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.

## **SKANSKA**

Provided cost estimates and constructability expertise for energy and emissions conservation measures; partnered for evaluation of technology pilots in its space to ensure accurate representation in models and decision-making.



Provided expertise on current and potential future grid scenarios, utility rates, and tariffs and modeled the static, projected, and CLCPA grid scenarios to demonstrate the vital role the grid plays in decarbonization.



Provided Empire Building Challenge and RTEM incentives and support for the innovation and analysis of potential decarbonization strategies. NYSERDA convenes suppliers and experts and will partner with us to amplify the replicable roadmap developed by this team.



Provided world class wireless BMS, advanced controls development, and performance optimization support as well as advanced development of FDD and analytics.

## STEPHEN DOIG

Provided 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.



Assisted with process design, management and facilitation of workshops.

## **Version 2.0 Workstream**





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

Evaluate the effects of changes to the grid

**Analyze** whole

system approach

based on energy

and supply side

assessment.

opportunities

models, economic

**Utilize** private know-how,



Utilize



**Evaluate** the technical and economic potential to achieve net zero emissions

**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

leadership, and public funding

multistakeholder engagement that thoroughly explores the role of tenants to meet targets

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

SOCIAL

INTROI

Our results are presented in five distinct packages, each with a different impact on emissions and financial scenarios. Each package includes a specific set of incremental energy and emissions conservation measures that will be implemented in a building over a 10 to 15-year period.

Our analysis requires the consideration of embodied carbon. McKinsey & Company states embodied carbon includes all GHG emissions associated with building construction, which includes those that result from the extraction, transportation, manufacturing, and installation of building materials on site as well as operational and end-of-life emissions. Equipment is reused, retrofitted, and retro commissioned until it is no longer useful, after which it is replaced with the most efficient system for optimal technoeconomic balance between emissions reduction and internal rate of return. Measures will also be phased in to avoid disruptions to tenant comfort and ensure compliance with lease terms.

We modeled two distinct scenarios; the first keeps New York City's grid "static" as it was in 2019, while the second adjusts grid emissions to align with the CLCPA. Static grid packages reduced emissions between 66.3% and 78.1% from 2007 levels. The CLCPA scenario packages ranged from 84.4% to 92.7% reduction from the 2007 baseline year.

The  $CO_2$  max packages represent the maximum possible energy and emissions reduction based on what is technically possible. The packages up to this point represent incremental additional projects and measures to achieve reductions, along with the associated projected economic results.

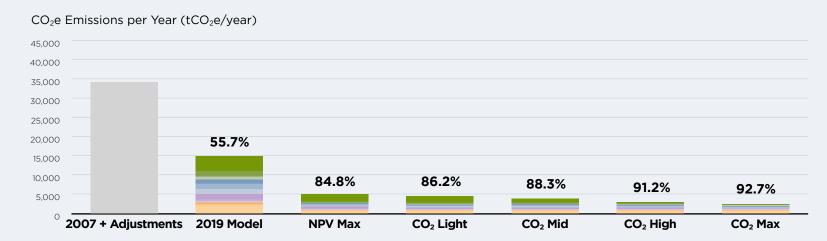
ESRT's definition for a carbon net zero existing building is that, by a drastic reduction in building operational emissions by at least 80%, in partnership with a renewably sourced grid aligned with CLCPA, and offset residual emissions through clean energy generation, RECs, and offsets, net annual building operational carbon emissions are equal to zero.

ESRT is on track to achieve our goal of net zero at the Empire State Building by 2030 and the commercial portfolio by 2035 through an 80% operational carbon emissions reduction. This will be achieved through a combination of energy efficiency measures, a more renewably sourced grid, and a 20% offset with off-site clean energy generation and strategic preservation of valuable carbon sequestration projects such as the 18 Reserves Project we announced in partnership with ACT in 2022.

## PROJECTED CO<sub>2</sub> EMISSIONS

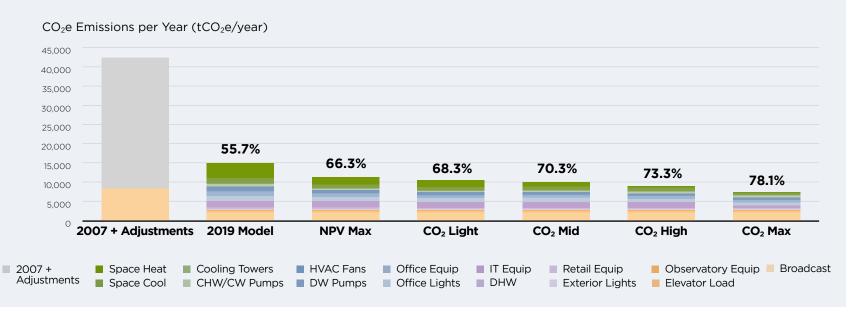
#### STATIC 2019 GRID SCENARIO

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.



<sup>9</sup> Data to the rescue: Embodied carbon in buildings and the urgency of now | McKinsey



We target an 80% reduction of operational carbon emissions from the 2007 baseline with a payback against investment of five to seven years or better. We will offset any residual carbon emissions for which total carbon reduction is not technically or economically feasible on site or poses safety and resiliency risks.

As demonstrated in the static grid line graph to the right, 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, which highlights the challenge to achieve net zero or compliance with LL97 with a static New York City grid.

The CLCPA grid scenario graph illustrates that all packages ensure that 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 "CO<sub>2</sub> 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, financial and emissions savings, 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 disclosures and updates to the Playbook.

found at https://knowledge.nyserda.ny.gov/pages/viewpage. action?pageId=110723298



**ENERGY STAR** Certified since 2010

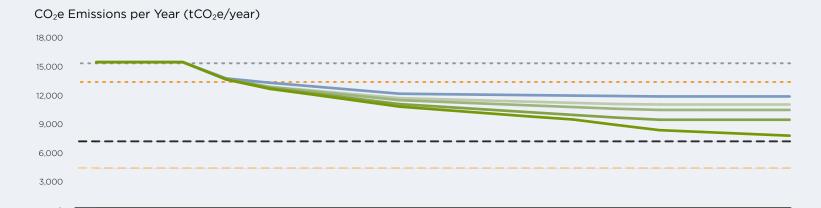


LEED EB O&M v4 Gold Tenants achieved LEED CI Gold and Platinum Certifications

## PROJECTED ANNUAL CARBON EMISSIONS

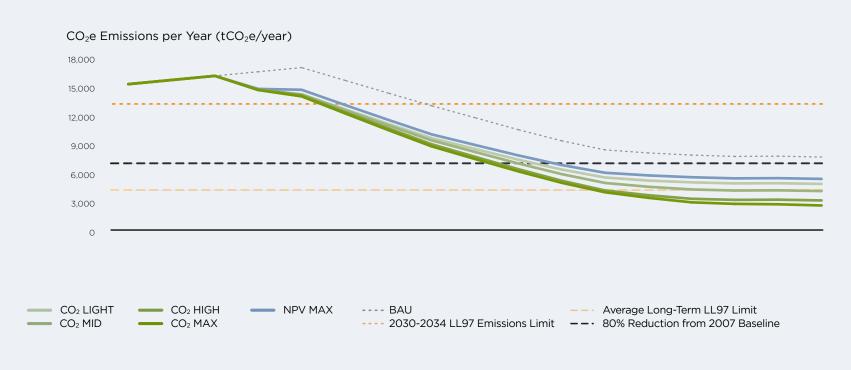
#### STATIC 2019 GRID SCENARIO

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 CO<sub>2</sub> Mid package would meet average long-term LL97 limit.







# Social Responsibility

Our single greatest strength is our people. ESRT prioritizes a safe and respectful workplace for all and invests in the health and well-being of employees to attract, develop, and retain top-tier talent. We recognize the power of each of us as informed individuals with shared missions to serve our customers and our collective power to build value for our stakeholders. The communities where we live and work impact our people every day, and we encourage and allow for our colleagues to make positive impacts on the communities they come from and where our assets are located.

Our commitment to bolster the health and resilience of buildings to improve the health, well-being, and satisfaction of our employees and tenants has never wavered. Our team's diversity and open communication improves ideas and decisions. The engagement, development, and growth of our employees is critical to our success. Our inclusive practices, policies, and behaviors contribute to and create value for our team members, tenants, suppliers, and the communities we serve. Our social responsibility strategy focuses on four core stakeholder groups:



**Employees.** Our company culture fosters an environment of inclusivity where all our employees can feel safe, respected, heard, celebrated, and valued. We invest in our employees' career development and education. We set targets for and have measurably increased our workplace diversity.



**Tenants.** Our current and prospective tenants are our top priority, and we create healthy, productive, and sustainably built environments that attract and retain tenants. Our modernized, energy-efficient buildings feature IEQ, and our amenities build a culture of health and inclusivity.



Community. We partner with meaningful organizations that promote equality and protect our planet and give our people the opportunities to drive change for the better. We encourage our team members to volunteer in our communities and make it easy to do so with group volunteer activities and paid days off for volunteer work.



relationships with high-performing and underrepresented vendors. We have developed minority- and women-owned business enterprises (MWBE) engagement practices and measure how many of our own dollars find their way to MWBE businesses. We make it clear to our vendors that we expect them to promote an inclusive work environment and promise their adherence to our Vendor Code of Conduct.



INTRODUCTION

# Social Impact Goals

We have identified social impact areas where we stand to make the most difference based on our business activities and have aligned our focus areas with the UN SDGs.



### **Health and Well-being**

Ensure healthy lives and promote well-being for all at all ages

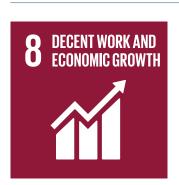
- Maintain WELL Health-Safety certification annually
- Support the overall health and well-being (physical, mental, and financial) of our employees and their families by offering essential health benefits, services, and policies
- Perform comprehensive annual indoor air and water quality testing at all properties
- Fitwel Champion designation



### **Gender Equality**

Achieve gender equality and empower all women and girls

- Maintain Bloomberg Gender-Equality Index membership annually
- Participant in United Nations Women Empowerment Principles
- Perform gender pay audits with an independent third-party expert
- Develop Women Empowerment Principle's Gender Action Plan to help embed gender equality into ESRT's strategies and policies



## **Decent Work and Economic Growth**

Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all

- Foster and attract diverse talent through our DEI initiatives
- Participate in the United Nations Global Compact
- Report to GRESB annually and align with TCFD, SASB, and GRI
- Achieve IWBI's WELL Equity Rating in 2023



## Responsible Consumption and Production

Ensure sustainable consumption and production patterns

- Continue to engage with Tier 1 suppliers on social and environmental practices
- Continue to report vendors, services, contractors, and supply chain diversity and drive supply chain diversity through inclusion of underrepresented groups in all construction bids
- Engage with the CDP to track suppliers' environmental impact



## **Sustainable Cities and Communities**

Make cities and human settlements inclusive, safe, resilient, and sustainable

- Further the development of a community engagement program with an emphasis on employee volunteerism in our communities
- Declare goal for company-wide volunteerism of 100%
- Engage employees and tenants with sustainability educational opportunities and events
- Measure employees on Corporate Citizenship as part of annual performance review

# **Employees**

Our single greatest strength is our people. ESRT prioritizes a safe and respectful workplace for our employees and invests in their health and well-being to attract, develop, and retain top-tier talent. Our Chief People Officer and our SVP, Director of Energy, Sustainability, and ESG oversee our initiatives in this area and report to the board quarterly on human capital management, talent attraction and retention, compensation and benefits, employee engagement, healthy and safety, and community outreach, among other topics.

ESG OBJECTIVES AND STRATEGY

## **Employee Engagement**

We gather corporate and union employee feedback through surveys and communication sessions and integrate this feedback into ESRT policies and practices. We also host a variety of events for our employees to foster togetherness and culture.



## **SURVEYS**

Each year, we conduct an annual anonymous employee engagement survey through a third-party survey administrator. We also conduct quarterly employee "pulse" surveys to gather additional data and employee views. Our HR department performs both internal and external survey data analysis and conducts interdepartmental collaborative meetings to present results, brainstorm ideas, and create actionable plans for improvement.

Our Annual Employee Engagement Survey for 2022 had 100% corporate employee participation, 93% union employee participation, and an overall favorability rate of 85% (versus 81% for other real estate companies that participate in the survey), and it revealed the following:



## EMPLOYEE SATISFACTION

Our commitment to our employees is exemplified by the results of our 2022 annual employee satisfaction survey 89%

of employees were proud to work at ESRT 93%

of employees feel the company offers engagement events that foster employee appreciation and camaraderie 96%

of employees feel the company is committed to a sustainable environment 97%

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



### COMMUNICATION

We publish a monthly internal newsletter, *HR Muscle*, that highlights recent business successes, celebrates employee performances and milestones, and covers Inclusion Committee progress, learning and development opportunities, upcoming employee events, employee benefit offerings, and much more.

**ESG OBJECTIVES AND STRATEGY** 

Budget Muscle informs the entire company of our annual budget process and progress and individual and department contributions thereto.

Our quarterly town hall meetings, led by our senior management team, discuss our earnings results and other topics important to the business, and answer questions from all colleagues. Twice a year, our Chairman, President, and CEO hosts CEO Q&As for each department.

### **EMPLOYEE FEEDBACK TAKEN INTO ACCOUNT**

We communicate with our colleagues the same way we communicate with our investors. We annually review and revise the policies in our Employee Handbook, taking into account employee feedback received through the surveys and communication forums throughout the year. Some examples of changes in recent years as a result of this collaborative process include:

- Increased our 401(k) match from \$1,250 per year to 100% of contributions up to 5% of an employee's salary (to the extent permitted by applicable law)
- Added employer funding of our Health Savings Account (HSA) program (\$1,000 for individuals, \$2,000 for family coverage)
- Enhanced our Parental Leave Policy with the addition of an extended paid "bonding leave"
- Increased paid time off, added Juneteenth, and provided paid volunteer time off
- Codified our flexible hours and remote work policies
- Created a "VIP Program" that allows employees to attend celebrity events at the Empire State Building
- Increased learning and development opportunities

## **EMPLOYEE EVENTS**

ESRT provides a host of events where our people can interact and share social enjoyment, aimed to promote a fun and healthy work environment, connectedness, and inclusion across the company. These activities include monthly Gratitude lunches, monthly bagels or barista service, themed employee appreciation events, holiday celebrations, educational seminars, and company-wide Athletics Committee events.



ESRT's Inclusion Committee hosts monthly Gratitude events with corresponding themes relevant to current holidays. Some events celebrated in 2022 were Juneteenth, Independence Day, Women's Equality Day, and Octoberfest. Each Gratitude event uses local or minority-owned businesses to cater the food and beverages.

INTRODUCTION

### **BENEFITS**

We protect the health, safety, and well-being of our employees and their families, who are provided with benefits focused on their physical, mental, and financial well-being. We consider movement as a key health promotion tool and encourage activity for our employees through the provision of standing and ergonomic desks, complimentary membership to the Empire State Building's state-of-the-art fitness center, an annual 30-day step challenge, and monthly activities hosted by our Athletics Committee. By the promotion of flexible work and encouragement of health and well-being as a priority, we have created the conditions for our people to thrive. We offer an Employee Assistance Program, a mental health counseling service to assist all employees and their families with work or personal problems. This program also includes legal guidance and financial resources programs. Throughout the year, ESRT hosts financial seminars on topics such as first-time home purchase, retirement planning, life insurance, and financial acumen, along with 1:1 financial consultation benefit.

In addition to these workplace measures, we provide our corporate employees with the following benefits to promote and support continued good health and well-being.



### **Healthcare, Life, and Disability Benefits**

- Medical, pharmaceutical, telemedicine, dental, and vision coverage
- Health savings and flexible spending accounts
- Life insurance
- Short- and long-term disability coverage
- Pet insurance



### **Employee Health and Well-Being 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
- Ergonomic computer equipment on request
- Private and comfortable lactation facilities



#### **Perks at Work**

- Complimentary Empire State Building Observatory access
- Plum Benefits (corporate entertainment benefits provider)
- Company-sponsored team building events
- Summer and winter employee appreciation events



#### Retirement

- Comprehensive financial planning services with our retirement plan consultant
- 401(k) employer match



#### **Work Home Balance**

- Flexible Fridays
- Flexible Remote Work Policy
- Commuter benefits program
- Holiday and paid time off
- One paid volunteer day per year at an organization of choice
- Free subscription to Urban Sitter for childcare, pet care, and adult care needs



### Well-being

- Various sponsored athletics activities each month, such as yoga, HIIT classes, kickball, softball, and more
- Additional programs through medical benefits provider include support for employee health goals, nutrition goals, gym reimbursement, and smoking cessation
- Health Advocacy, which provides a Benefits VIP to answer claims and eligibility concerns
- Flu vaccinations for employees and their families

## **SAFETY**

To keep our employees and their information safe at work, we have a designated crisis management team and cyber incident response team, which meet regularly and conduct periodic tabletop training and simulations. We provide relevant employee training on our safety measures and procedures for emergency situations. All employees are required to participate in first aid training provided by the Occupational Safety and Health Administration (OSHA).



## Succession Planning, Learning, and Professional Development

To position our employees for success, we invest in their professional development and provide them with access to a variety of learning opportunities. This continual development of our workforce is imperative for performance and retention and our company's growth. Our programs include the following:



### **Tuition Assistance Program**

ESRT provides tuition assistance for corporate employees enrolled in courses related to their current positions with the company. Employees with one year of ESRT service may request tuition reimbursement approval by their manager. The tuition reimbursement program is inclusive of all corporate employees for jobspecific development.



## **Empire Academy**

Our Empire Academy program provides employees with educational programs, resources, and tools. The program provides monthly job-specific educational seminars on a variety of topics that promote professional development, educational awareness, and personal growth.



## **New Hire Onboarding Program**

We have reimagined our new hire onboarding program to include more developmental conversations and increased feedback from new hires. This improves our efforts to provide a best-in-class employment experience and attract top talent.



## Talent Management, Professional Development, Succession Planning

Our HR team regularly engages with managers to discuss employee growth paths, development opportunities, and succession planning. We use talent management tools, such as 9-Box, annual reviews, mid-year reviews, and 360 feedback, to assess performance and talent potential of current employees and identify future talent and developmental pipeline needs. We refer to these tools for the attraction and retention of employees to assist with the growth of high-potential employees.



## **Employee Performance Review**

In order to gather and process employee feedback, we conduct mid-year and fourth quarter company performance appraisals. Part of the review cycle includes a 360-feedback component that provides employees with feedback from their managers, those reporting to them, and peers of their choice to further employee growth and development.

### **ESRT INTERN PROGRAM**

ESRT offers internship programs across most departments predominantly for college students. ESRT ensures that traditionally underrepresented individuals are included in our program. Interns receive first-hand exposure to the real estate industry and train on the job, shadow our employees, and work on projects within our portfolio. Every year, interns are assigned summer-long projects from their allocated departments, which they present to senior leaders at the conclusion of the program. Successful summer interns are offered full-time employment upon graduation.

### **MANDATORY TRAININGS**

All corporate employees are required to complete the following mandatory annual trainings provided online:

- Bribery and Corruption
- Code of Business Conduct and Ethics
- Cybersecurity
- Employee Manual Recertification
- Human Rights
- Insider Trading
- Preventing Workplace Discrimination
- Unconscious Bias

GOVERNANCE

# Diversity, Equity, and Inclusion (DEI)

ESG OBJECTIVES AND STRATEGY

At ESRT, DEI is every employee's responsibility. We believe diverse perspectives and experiences from colleagues who have a safe and respectful work environment enhances decision-making and innovation. We continue to increase our diversity, particularly in leadership roles. We disclose U.S. EEOC diversity data at all levels, including race, ethnicity, and gender. We mandate diversity in candidate pools for new hires, ensure merit-based advancement, prohibit discriminatory practices in the workplace, and educate all colleagues at all levels.

Since 2021, we have engaged with a certified MWBE and B-Corp consultant to provide ongoing training

and education, help develop our DEI roadmap, and create custom programming to accelerate our DEI journey. Our consultant also advises our employee-led Inclusion Committee.

In 2022, we required our employees to attend DEI workshops focused on unconscious bias. We taught tactical techniques and strategies employees could immediately apply to minimize biases in the workplace and be more inclusive colleagues. We also hosted executive visioning workshops on DEI topics for our executive leaders. All new employees are required to take unconscious bias training in their first 90 days with ESRT.





## **INCLUSION IN BLOOMBERG GENDER-EQUITY INDEX**

ESRT was selected for inclusion in the Bloomberg Gender-Equality Index in each of our two years of participation. The Bloomberg Gender-Equality Index aims to track the performance of public companies committed to transparency in gender data reporting. This reference index measures gender equality across five pillars: female leadership and talent pipeline, equal pay and gender pay parity, inclusive culture, anti-sexual harassment policies, and pro-women branding. We at ESRT are committed to equity across the gender spectrum to foster an inclusive and collaborative culture for our employees, tenants, and the communities we serve.

## **DEI 2022 ACCOMPLISHMENTS**

- Unconscious Bias Training with 100% completion
- Measured DEI in engagement surveys
- Executive Visioning Strategy Sessions
- Signatory of Women Empowerment Principles
- Member of UN Global Compact
- Early adopter of WELL Equity Rating
- Rolled out the use of pronouns in email signatures
- Tied senior executive compensation to DEI representation goals
- Implemented cost of living adjustments for employees

### **DEI ROADMAP 2023**

### Overview of the DEI journey and goals at ESRT

Our executives and our consultant have agreed upon the following five priorities for our DEI journey and ESRT goals:



#### Communication

High-level introduction of ESRT's DEI strategy to employees and preview of upcoming opportunities to learn more. CEO Q&A sessions to connect everyone to DEI at ESRT and answer employees' questions.

## **DEI Training Workshops**

Provide continued DEI training to people managers and employees throughout the year to broaden foundational DEI knowledge connected to ESRT's goals.

## **DEI in Policies and Programs**

Ensure equitable policies and design interventions and programs in our buildings, organization, and community.

Annual rotation in employee-led Inclusion Committee to allow for new representation.

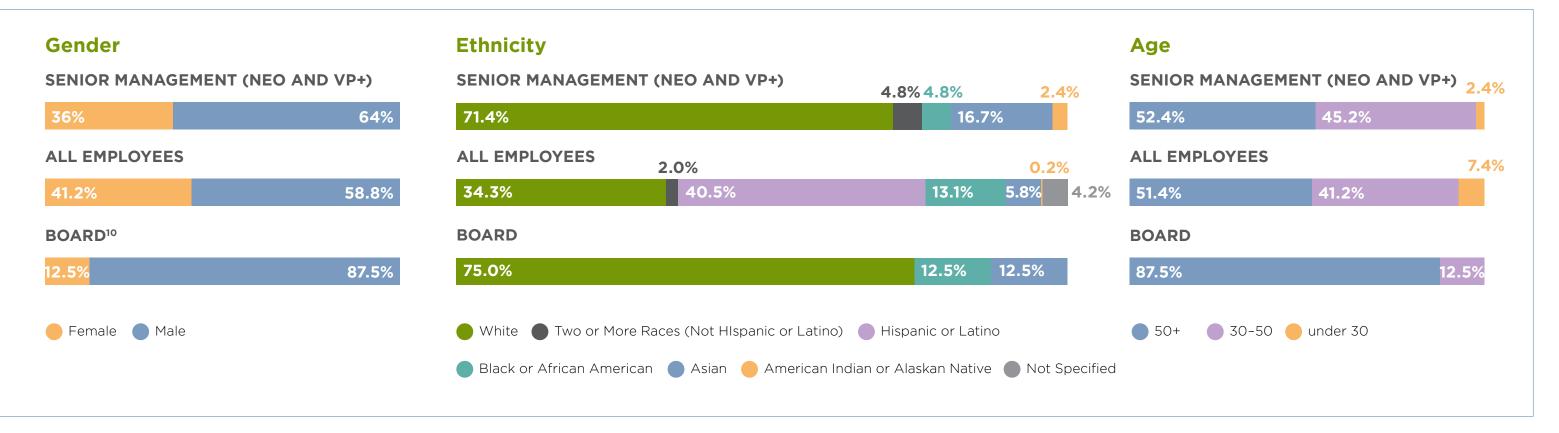
## **Supply Chain Diversity**

Deeper work into internal diverse supplier approach and tracking system across all departments. Clear internal communication and direction on process and reporting.

## **Succession Learning, Planning, and Development**

Transparency for career development coaching opportunities and equitable selection process in future leadership development programs. Begin Inclusive Professional Development and Training Reimbursement Policy for all employees.

## **WORKFORCE AT A GLANCE**



<sup>&</sup>lt;sup>10</sup> As discussed in the company's DEFA 14A filed on 4/18/23, we have an active search underway for a new director and we have under consideration only female candidates.



### ATTRACTING DIVERSE TALENT

We track candidates through the HR process to ensure a diverse slate of candidates, which includes those traditionally underrepresented in the real estate industry, are sought for every vacancy. We maintain an evergreen posting for a pipeline of future talent and work with our recruitment firms to emphasize our requirement for highly qualified candidates from diverse backgrounds. We set a target of at least 25% of the candidate pool to be diverse when possible, and we then hire on merit. We have successfully increased our diversity through hiring.

#### **NON-DISCRIMINATION**

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 harassment and retaliation. We do not tolerate unlawful discrimination, including any form of unlawful harassment or retaliation at work or in work-related settings by or against anyone.



## **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 survey administrator across 100% of our portfolio related to property management and sustainability. In addition, we directly engage with our tenants via town halls and education sessions specifically focused on sustainability.

ESG OBJECTIVES AND STRATEGY

## **Sustainability Solutions for Our Tenants**

We complete tenant sustainability walk-throughs upon request to evaluate existing tenant spaces for potential sustainability and ESG improvement opportunities at no charge. We provide quarterly ESG data to tenants upon request, and our website includes a tenant Sustainability Toolkit of resources and tools.

### **HIGH-PERFORMANCE HEALTHY BUILDINGS**

ESRT is committed to provide healthy work environments in the buildings we own and operate. We have developed and implemented rigorous IEQ measures across our portfolio. Our entire portfolio is WELL Health-Safety certified, and we were among the first to be certified three times. The WELL Health-Safety Rating confirms that we keep spaces clean and sanitized, provide essential health benefits and services, communicate our health and safety efforts to employees and tenants, prepare them for emergency situations, and annually assess air and water quality. 89% of our New York City portfolio is Fitwel certified, which includes our two starred certified corporate office headquarters. Fitwel certification evaluates and rates building health and well-being features such as surrounding community health impact, access to healthy foods, occupant safety promotion, and physical activity endorsement.





## **Indoor Environmental Quality**

Americans spend over 90% of their time indoors on average. With that in mind, delivery of the highest caliber IEQ has been a key tenet of our sustainability strategy for more than a decade. Our industry-leading, comprehensive, and state-of-the-art program focuses on operational best practices to ensure healthy, happy, and productive spaces. These best practices include the use of MERV 13 filters, ASHRAE 62.1-compliant ventilation, bipolar ionization air purification technology, daylighting, CO<sub>2</sub> sensors, green cleaning practices, integrated pest management strategies, low-emitting materials, and annual third-party air and water quality testing. Workers in naturally lit offices report a greater than 50% reduction in eye strain, headaches, and drowsiness. Our CO<sub>2</sub> sensors ensure that CO<sub>2</sub> is consistently at 750 ppm, the optimal level for buildings that allows employees to perform 50% better on cognitive tasks. We continually test, pilot, vet, and implement IEQ strategies and technology across our portfolio for the health and well-being of our employees and tenants.

**ESG OBJECTIVES AND STRATEGY** 

## **Amenities**

We operate and design our buildings and amenities to build a culture of health that accommodates our tenant needs and establishes an inclusive, engaged community. For instance, the Empire State Building features over 65,000 square feet of amenities that include a state-of-the-art fitness center, a private conference center, and eight in-building dining options. A 400+ person all hands lounge, basketball and pickleball courts, and two golf/virtual reality simulators will be open to all tenants in the near future. Our tenants that are a part of The Campus, which includes our Broadway properties, 111 W. 33<sup>rd</sup> Street and 501 7<sup>th</sup> Avenue, will soon have access to an 8,000 square foot rooftop lounge to relish the greenery, sunshine, and fresh air with iconic New York City views and a 70+ person tenant lounge with top-of-the-line ESRT IEQ equipped throughout.

We create opportunities for our tenants to interact and share social enjoyment while staying well informed on all building services. Our ESRT+ Tenant App is a key part of our continuous efforts to improve the tenant experience with enhanced communication and easy access to resources such as mobile key access, building resources, dining and retail services, perks and events in our neighborhoods, and networking capabilities to connect with other tenants in the office from anywhere. We also provide services for tenants to easily reserve conference rooms, arrange on-site catering and much more.



<sup>&</sup>lt;sup>11</sup> U.S. Environmental Protection Agency. 1987. The total exposure assessment methodology (TEAM) study: Summary and analysis. EPA/600/6-87/002a. Washington, DC

<sup>&</sup>lt;sup>12</sup> Hedge A and Nou D. Worker Reactions to Electrochromic and Low e Glass Office Windows. Ergonomics Int J 2018, 2(4): 000166

MacNaughton, P., Pegues, J., Satish, U., Santanam, S., Spengler, J., & Allen, J. (2015). Economic, environmental and health implications of enhanced ventilation in office buildings. International Journal of Environmental Research and Public Health. 12(11), 14709-14722. https://doi.org/10.3390/ijerph121114709



# Community Engagement

**ESG OBJECTIVES AND STRATEGY** 

ESRT is dedicated to accelerate positive change in the communities where we work and live. We empower our people to offer their time and talent to our local communities through meaningful volunteerism and to support organizations with fundraising and donations as well. To this end, we organize volunteer opportunities for our employees and also offer paid volunteer time off for them to dedicate time to charitable organizations of their choice. We believe community engagement is an enriching component of our ESG strategy.

In 2022, ESRT and our employees contributed:

1,300 hours of volunteer work at 10 ESRTsponsored organizations

ESRT employee personal organizations

**ESRT-sponsored** events

ESRT employee personal events

In 2022, ESRT employees volunteered with The Outreach Program, whose mission is to provide safe water, food, medical care, and education to children and those in need in the U.S. and abroad. Our volunteers packaged food for Ukrainian refugees in need and contributed:

volunteers

hours of volunteer work bags of food

7,560 meals



## **2022 Employee Community Engagement Activities**

This year, our employees sought active community engagement through targeted events that improve environmental sustainability and community health and support women and youth in the community, such as:

#### **Harlem Grown**

A non-profit organization that provides mentorship opportunities to youth in Harlem through hands-on education on urban farming, sustainability, and nutrition. This year, approximately 27 of our employees composted, weeded, and added mulch to the flower beds. They had an essential role in the gardening process.

## **The Billion Oyster Project**

A non-profit organization focused on volunteer efforts and education in biodiversity restoration of the degraded New York Harbor. This year, 45 volunteers cleaned oyster shells and created decorative shell garlands for a fundraiser event. These shells were then repurposed as reefs for oyster population growth.

#### **New York Public Schools**

P.S. 281's student-led Green Team visited the Empire State Building and learned about its sustainable practices. ESRT's sustainability team shared best practices with the 4th and 5th grade students, specifically highlighting what inspired them to enter this field, the reasons behind improving the lighting system, and the goals for lowering emissions citywide. This experience inspired the Green Team to consider small ways that they can reduce energy and encourage others to do the same, especially as they strive to improve energy use and recycling within their school community.

#### The Lower Eastside Girls Club

A non-profit organization that supports young women and gender expansive youth of color throughout NYC toward healthy and successful futures through free, innovative year-round programming and mentoring. Our sustainability team partnered with Stacks & Joules to lead a STEM curriculum for students to learn about building systems, energy efficiency, and how to decarbonize the Lower Eastside Girls Club building.

#### **Bottomless Closet**

The Bottomless Closet experience empowers women to feel confident and prepared to tackle interviews, start new jobs, and begin their journeys to self-sufficiency. ESRT donated \$2,500 to assist in the resume and interview preparation programs as well as over a closet's worth of clothing, shoes, bags, and purses.

#### **Blood Drives**

Annually, we partner with the New York Blood Center to host an on-site blood drive event for employees who can donate. Over 36 of our employees gave blood this year, saving at least 66 lives!

## **St. Francis Pantry**

To assist with meal donations, we partnered with St. Francis Pantry, and ESRT colleagues made 2,300 sandwiches in our breakroom. ESRT additionally donated \$1.25 per sandwich made, a total of \$3.850 to those in need.

#### **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. This year, 25 volunteers helped beautify the Jacob H. Schiff Playground, which included repainting, weeding, and raking. Located in Harlem, this playground is one of the largest playgrounds in Manhattan and offers a variety of children's athletic activities.

## INTE

#### **TOWER LIGHTS**

A defining feature of the New York City skyline since 1976, the Empire State Building lights have captured the world's imagination for decades. We maintain a tradition where we change the color of the lights to recognize important occasions, holidays, and organizations throughout the year. Since 2012, the building has used a state-of-the-art LED lighting system that is able to display more than 16 million colors. On March 26, 2022, in partnership with the World Wildlife Fund, our lights turned off for an hour in observance of Earth Hour. On June 26, 2022, in honor of NYC Pride, our lights shined in rainbow colors. On October 3, 2022, in partnership with Estée Lauder Companies, the building turned pink in honor of breast cancer awareness month. On November 3, 2022, the building lit up in teal in honor of the Alzheimer's Foundation of America's Light the World in Teal Campaign. Organizations are chosen via an application form submitted on our website; applications are reviewed by the lighting partner team. For additional information and an up-to-date calendar, visit our Empire State Building website.

**ESG OBJECTIVES AND STRATEGY** 

### **HOMELESS ASSISTANCE FUND**

The Homeless Assistance Fund is a public-private initiative between New York City and housing non-profit Breaking Ground's "Connect to Care" program. The program provides services and mental health resources to homeless New Yorkers. In 2022, ESRT donated use of prebuilt office space to be used by Breaking Ground through August 2023.





## THE EMPIRE STATE BUILDING RUN-UP

Noted by some as the ultimate endurance test, the annual Empire State Building Run-Up event challenges runners around the world to race up its famed 86 flights or 1,567 stairs. Presented by Turkish Airlines, the official charity of the Run-Up is the Challenged Athletes Foundation (CAF). Runners who participate in the Run-Up's CAF heat fundraise to raise awareness and donations for the organization. In 2022, 380 runners participated and \$62,800 was raised to help people with permanent physical challenge gain access to adaptive sports equipment, athletic training, an active lifestyle, community, and mentorship. To honor this event, the Empire State Building displayed red and white lights.



## Vendors and Suppliers

ESRT is committed to foster relationships with high-performing and underrepresented vendors and expects its vendors to promote an inclusive work environment. We are building a system to track vendors, services, contractors, and supply chain diversity, and we emphasize the importance of diversity with each relationship. Per the policy we implemented in 2021 for construction vendors, when a project goes out to bid, one of every four vendors must be diverse when possible. In 2022, we awarded 22% of construction project contractors totaling nearly \$70 million to MWBE owners.

ESRT requires all partners, suppliers, and vendors to adhere to our <u>Vendor Code of Conduct</u>, which outlines our expectations for ethical conduct, legal and regulatory compliance, environmental standards, human rights and labor standards, diversity, equity and inclusion, and health and safety, among other topics. Additionally, ESRT contracts require that new and existing suppliers comply with all local, state, and federal laws, which incorporates the New York City Human Rights Law.

ESRT, in conjunction with the Real Estate Roundtable, has been at the forefront of the real estate industry's development of an MWBE business directory from which the entire industry can benefit. Our procurement practices promote the procurement of sustainable goods such as green cleaning products and sustainable building materials to foster the health and well-being of our employees and tenants.





## **Human and Labor Rights**

ESRT is committed to reduce human rights risks throughout our operations, supply chain, and partnerships. These risks include human trafficking, child and/or forced labor, discrimination, unequal pay, no right to collective bargaining and freedom of association, and poor working conditions. ESRT expects employees, suppliers, and third-party contractors to maintain and enforce our high standards on human rights. In 2022, ESRT became a participant of the United Nations Global Compact; a voluntary initiative that is a call to companies globally to align their operations and strategies with Ten Principles in the areas of human rights, labor, anti-corruption, and the environment. ESRT is also a signatory of the United Nations Women Empowerment Principles, which fosters business practices that empower women, including equal pay, equal opportunity for career advancement, paid parental leave, and zero tolerance for sexual harassment in the workplace.

A copy of this policy is provided on ESRT's website.

You can read our full Human Rights Policy here.





ESG OBJECTIVES AND STRATEGY



Governance begins with our commitment to manage our business responsibly in a transparent manner. ESRT builds trust with our stakeholders with our integrity and accountability and promotes forthright, ethical policies and practices within our entire organization and across our supply chain. Our comprehensive and thorough disclosure and reporting reflects the values that are embedded in our culture and inform the way we operate on a daily basis.

# Board and 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 committees:

GOVERNING BODY	SUSTAINABILITY-RELATED RESPONSIBILITIES	2022 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 arise from other committees are also referred to the full board as appropriate.	Matters referred by committees per discussions noted below. Our entire board is on the Nominating and Corporate Governance Committee and receives the presentation noted below from our SVP, Director of Energy, Sustainability, and ESG and Chief People Officer on topics such as ESG certifications and ratings, employee engagement, community outreach, and the sustainability report.
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 such as climate-related risks and human and labor right risks.	Regular discussions regarding ESG risks with internal audit consultant, such as review of risk and mitigation strategies to address emissions disclosure and reporting, LL97, and physical and transitional climate-related risks. Tabletop exercise with external consultant on cybersecurity risks.
Compensation and Human Capital Committee	The committee is responsible for overseeing the company's strategies and policies related to human capital management, including matters such as DEI, health and safety, workplace environment and culture, pay equity, and talent attraction and retention.	Regular discussions regarding human capital management, talent attraction and retention, health and safety, DEI, and compensation and benefits.
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 and environmental and sustainability matters and making recommendations to the board regarding such matters.	Presentations by SVP, Director of Energy, Sustainability, and ESG and Chief People Officer on topics such as ESG certifications and ratings, employee engagement, community outreach, and sustainability report.

Our comprehensive, all-department 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, COO, and CFO, Director of Leasing, property construction and operations 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 and Crisis 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-today management of enterprise risks, including management of the company's ERM 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 are:

#### **Audit Committee**

Oversees policies with respect to risk management, including cybersecurity risks, and ESG risks such as climate change, climate-related risk, and human capital

### **Compensation and Human Capital Committee**

Oversees human capital management risks, including DEI, health and safety, culture, pay equity, and talent attraction and retention

Further, the board has engaged an independent consultant to supplement management's activities on enterprise risk assessment, which rotates through each area of our activities and reports on a quarterly basis to the Audit Committee. The consultant, with the input of management, provides a heat map of the risks to identify the urgency and potential impact. The board engages additional consultants as it deems necessary to investigate and prepare for new and emerging risks. For example, in 2022, the board engaged an independent consultant to conduct a cybersecurity tabletop exercise.

## DEI 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 DEI as core to our business strategy, not only from a workforce development perspective but also as an integral piece to our success as a corporation. We continue to strive toward 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.



**GOVERNANCE** 



# 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.







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

In 2022, we responded to the GRESB Assessment, which evaluated our organization against TCFD criteria and our approach to climate-related risks. Our assessment is below.

	Category	Mitigation
PHYSICAL RISKS	Climate Change and Acute Weather Events Flooding, Hurricanes, Winter Storms, Extreme Temperatures	We have developed a Climate Change Adaptation and Resilience Policy for existing properties and potential acquisitions. Our Climate Change Risk Assessment Checklist is 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. ESRT's climate change asset level requirements include conducting comprehensive risk assessments to identify relevant climate change risks in 1.5°C and 2°C scenarios, analyze climate change risks and potential impact, and develop an operational plan with guidelines for flooding, windstorm, hurricane, and freeze/winter storm.
	Geographic Concentration	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. ESRT has geographic concentration risk due to the concentration of its properties in the Greater New York Metropolitan area (GNYMA), particularly in Manhattan. Our Enterprise Risk Assessment identified mitigation strategies that are currently in place at ESRT, such as a formal disaster recovery plan and business continuity plan that have been communicated to employees and tested as well as disaster recovery and business continuity coverage through multiple insurers to diversify the risk basis.



NTRODUCTION ESG OBJECTIVES AND STRATEGY

ENVIRONMENTAL

SOCIAL

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	Category	Mitigation
SOCIAL RISKS	Physical Security and Terrorism	Due to the high-profile nature of our office buildings, 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, and radiological weapon attacks.
	Human Health	We perform annual Indoor IAQ testing at all commercial buildings to evaluate exposure and risks to human health. All IAQ tests are reviewed to ensure that 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 three million square feet of our portfolio properties.
	Human and Labor Rights	We require all of our partners, suppliers, and vendors to adhere to our standards as set forth in our Vendor Code of Conduct, which covers topics such as compliance with law, including human rights and labor standards. We continually monitor our labor practices, including our relationships with unions, for compliance with law and best practice under the guidance of expert outside counsel and advisors. Since all of our operations are in the United States, particularly in the GNMYA, we believe the risk of exposure through our operations or those of our primary suppliers to human trafficking and child and/or forced labor are low.
	Cybersecurity	We have firewall and penetration testing, cybersecurity insurance, internal employee trainings on safeguarding information, a Director of Information Security dedicated to cybersecurity, cybertraining modules, and a continual assessment of new cybersecurity tools.
TRANSITION RISKS	Comprehensive	Quarterly Enterprise Risk Assessments and ongoing reviews of policy, legal, technology, market, and reputational risks identify short-, medium-, and long-term transition risks.
	<b>Policy</b> Energy and Climate Legislation	We evaluate energy and climate legislation in regions and cities where we operate, including evaluating the compliance status of legislation concerning our carbon footprint and measuring the financial impact of energy and climate legislation, including the NYC Climate Mobilization Act and LL97. Our Chairman, President, and CEO and our SVP, Director of Energy, Sustainability, and ESG lead the NYC Climate Mobilization Act Working Group and other relevant working groups to define and understand energy/carbon regulation transition risks that could impact the organization. We regularly consult with expert outside counsel and advisors as well.
	<b>Technology</b> Capital Investments in Low-Carbon Technology	Advanced optimization and machine learning technologies, battery storage, renewable energy, lighting and controls, building management systems, equipment, and tenant plug loads and controls are evaluated to mitigate technology risks related to capital investments in low-carbon technology.
	Market 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.

## **Board Composition and** Refreshment

## **Director Qualifications**

Per our Corporate Governance Guidelines, directors should:

- Possess the highest personal and professional ethics and integrity, exercise good business judgment, and commit to represent the long-term interests of the company and our shareholders
- Have the time, interest, and ability to engage actively in the board and its committees and outreach with the management team
- Have an inquisitive and objective perspective, practical wisdom, and mature judgment
- Serve our goal of diversity by providing a range of viewpoints relevant to our business

In order to build an independent board with broad and diverse experience and judgment that is committed to representing the long-term interests of our shareholders, our board seeks out an overall mix of directors with relevant skills and experience for a publicly traded, NYC-based office REIT as well as diversity, independence, sufficient capacity to give ESRT their attention and focus, and a balance of tenures. Our board continually evaluates its composition and collective experience based on the company's needs and strategy. Our Corporate Governance Guidelines provide that a majority of our board's directors must be independent as required by the listing standards of the NYSE.

Our Nominating and Corporate Governance Committee of the Board of Directors oversee board qualification and nominations and develop and recommend to the board the corporate governance principles and guidelines applicable to the company. For more information on the responsibilities of the Nominating and Corporate Governance Committee Charter, see the charter.

For more information on our governance practices and board composition, see our 2023 proxy report.

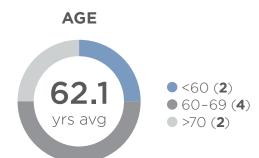


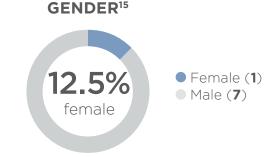


## **Board Diversity**

The board seeks diverse composition in terms of race, gender, age, and experience. We have rotated in four new independent directors since 2017, three of whom are diverse in terms of gender, race, or ethnicity and rotated out three directors. In 2021, we amended our Corporate Governance Guidelines to codify our commitment to diversity by adding 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. The company will consider the opportunity to enhance the diversity of the board with any new director appointment.

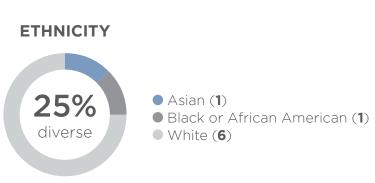
## **BOARD SNAPSHOT14**





**ESG OBJECTIVES AND STRATEGY** 









#### **BOARD REFRESHEMENT**



## + 2017: Leslie D. Biddle - 2017: Alice M. Connell

- + 2019: Patricia S. Han
- + 2020: R. Paige Hood
- + 2020: Grant H. Hill

#### **SUBTRACTION**

- 2020: William H. Berkman
- 2023: Leslie D. Biddle

### **DIRECTOR SKILLS**

**75%** Real Estate Experience

100%

Target Tenant Industry Experience Experience

62.5%

Accounting Experience/ Financial Literacy

50% Cybersecurity and

Technology 12.5%

Energy and Environmental Sustainability

**75%** Public Company Board Experience

87.5%

Investment Experience

100%

Executive

37.5%

Digital Media and Commerce

87.5%

Human Capital Management

**75%** 

Risk Management Experience



<sup>15</sup> As discussed in the company's DEFA 14A filed on 4/18/23, we have an active search underway for a new director and we have under consideration only female candidates.





## **Ethics and Compliance**

ESRT has a Code of Business Conduct and Ethics, which was adopted and applies to our board, directors, officers, and employees and is reviewed and overseen by our Nominating and Corporate Governance Committee. We also have a Vendor Code of Conduct that applies to our suppliers and vendors. We train our employees on the Code on an annual basis and provide additional compliance training on key topics, including insider trading, anti-harassment and discrimination including sexual harassment, human rights, and cybersecurity, on a rotational basis. All employees are required to annually reaffirm their compliance with the Code.

The company actively monitors internal compliance with its Code of Business Conduct and Ethics. 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 U.S. Securities and Exchange Commission or the New York Stock Exchange.

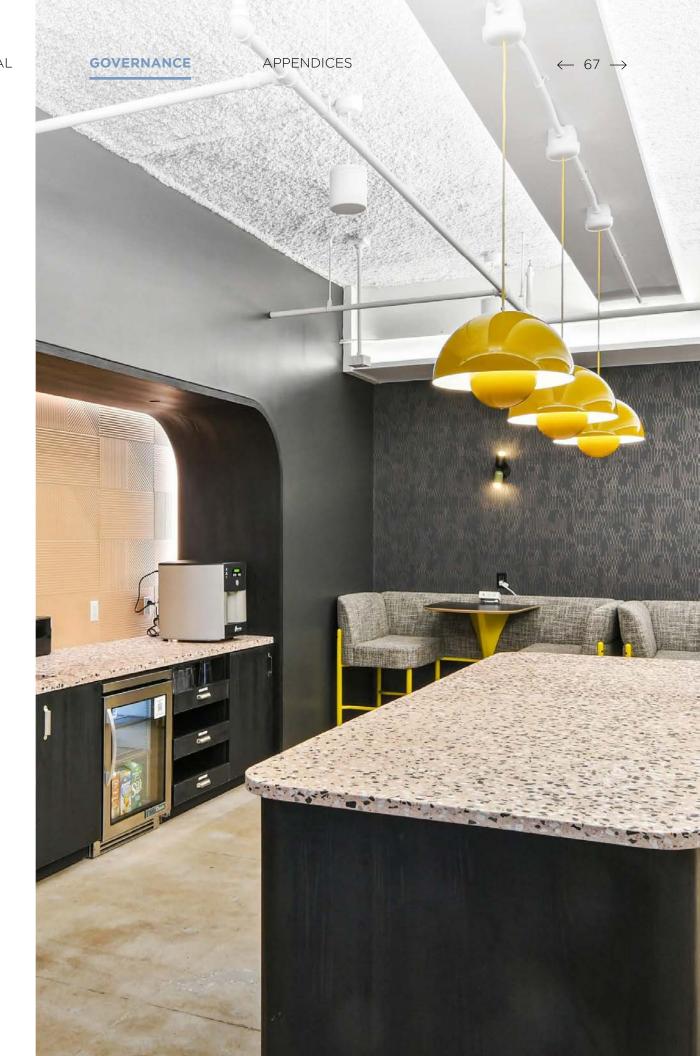
## **Mandatory Training**

All employees must complete mandatory training annually, including:

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

## **Vendors and Procurement**

At ESRT, our culture of ethics extends to our entire supply chain. Our <u>Vendor Code of Conduct</u> outlines our expectations for our partners, service providers, suppliers, vendors, and contractors to work ethically and in a manner that is consistent with our high standards.



# Disclosure Frameworks and Industry Alignment

Transparency is a key component of governance and accountability, as it informs our stakeholders of our actions and their results. We use 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. For the third consecutive year, ESRT achieved the GRESB Five Star Rating with an overall score of 95. Consistent with last year, ESRT was ranked first with a score of 96 and an A rating in the Public Disclosure Assessment. We received three real estate sector leader recognitions: Global Sector Leader, Regional Sector Leader Americas, and Regional Listed Sector Leader Americas for Office. Sector leaders are the best performers by sector and region across all GRESB assessments. This significant achievement 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 use 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

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	Υ	88, 5 Stars	BBB	E:3, S:4, G:7	Υ	Low Risk
2021	Υ	94, 5 Stars	BBB	E:2, S:2, G:7	Y	Low Risk
2022	Υ	95, 5 Stars	BBB	E:2, S:3, G:6	Υ	Low Risk

Listed on Bloomberg Gender-Equality Index

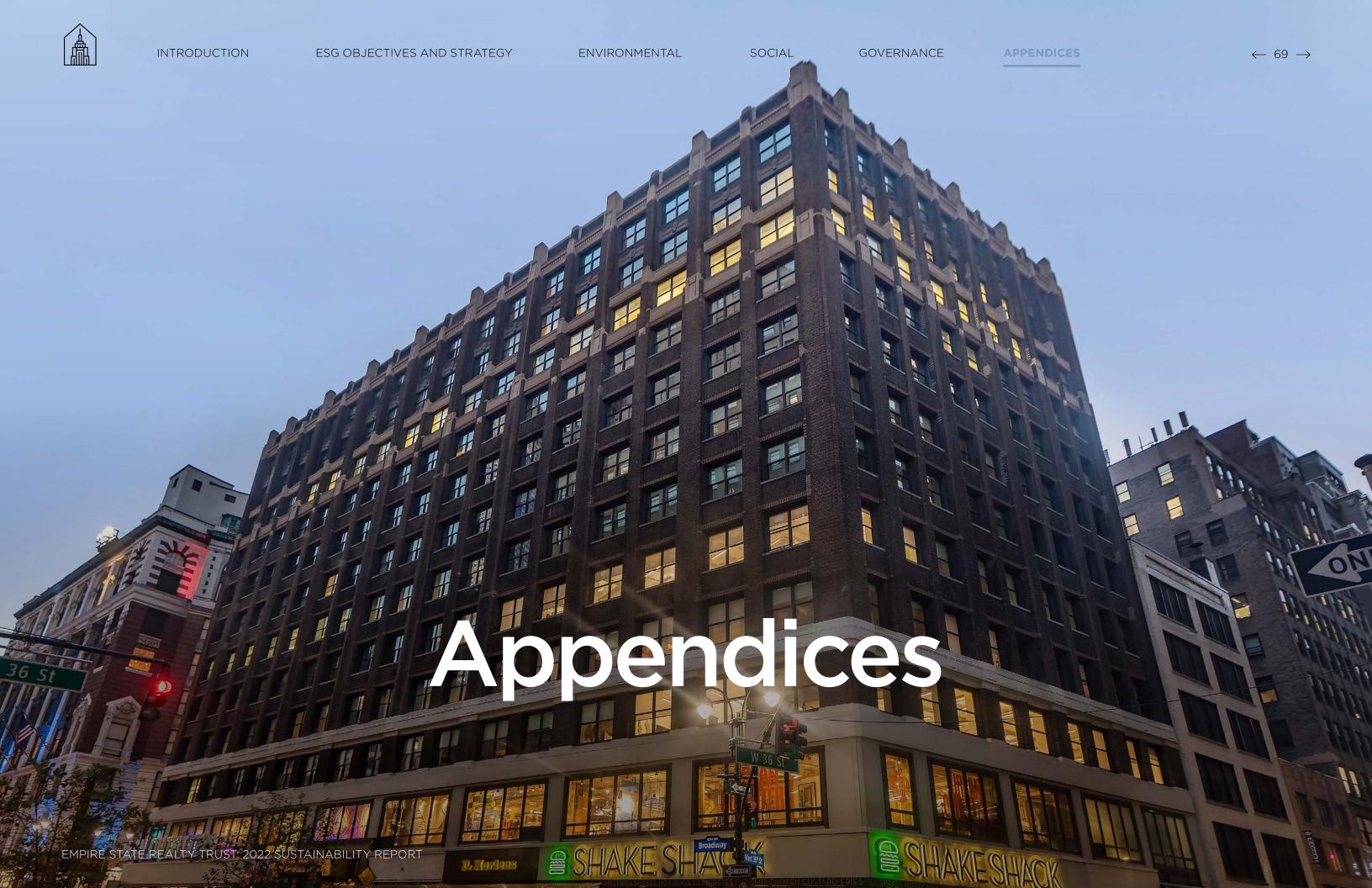
frameworks, ESRT continually evaluates our scoring to identify potential opportunities to advance our program and exceed industry standards. The table to the left documents our 2020, 2021, and 2022 scores in some of the leading industry ESG frameworks.

## **Goal-setting**

Since 2021, we have committed to the SBTi. In 2022, we received 1.5°C target alignment validation from SBTi. We submitted corporate GHG reduction goals in line with the 1.5°C reduction scenario for Scopes 1, 2, and 3 emissions. 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 that 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 that 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 three years. See page 16 for more information.



ESG OBJECTIVES AND STRATEGY

# **About This Report**

This is ESRT's third sustainability report. The report covers 2018, 2019, 2020, 2021, and 2022 environmental programs and performance. All reported performance data is for the calendar year ending December 31, 2022, unless stated otherwise. All financial data is reported in U.S. dollars. CodeGreen Solutions has calculated and verified the GHG 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.

























## **GRI Content Index**

The 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 ESRT 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	Workforce at a Glance			
2-9	Governance structure and composition	Board and Management Oversight of ESG			
2-10	Nomination and selection of the highest governance body in sustainability reporting	Board Composition and Refreshment Board Diversity			
2-11	Chair of the highest governance body	Letter from Chairman, President, and Chief Executive Officer and SVP, Director of Energy, Sustainability, and ESG			
2-12	Role of the highest governance body in overseeing the management of impacts	Board and Management Oversight of ESG			
2-13	Delegation of responsibility for managing impacts	Board and Management Oversight of ESG			
2-14	Role of the highest governance body in sustainability reporting	Board and Management Oversight of ESG			
2-15	Conflicts of interest	Ethics and Compliance Board Composition and Refreshment			
2-16	Communication of critical concerns	Board and Management Oversight of ESG			
2-17	Collective knowledge of the highest governance body	Board Diversity			
2-18	Evaluation of the performance of the highest governance body	Board and Management Oversight of ESG			



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Disclosure	Title	Reference/Location		
GRI 2: Gene	ral Disclosures			
2-19	Remuneration policies	Benefits		
2-20	Process to determine remuneration	Employees		
2-22	Statement on sustainable development strategy	Letter from Chairman, President, and Chief Executive Officer and SVP, Director of Energy, Sustainability, and ESG ESRT ESG Strategies and Components		
2-23	Policy commitments	Quantifiable Improvement Net Zero and Carbon Neutrality Social Impact Goals		
2-24	Embedding policy commitments	Quantifiable Improvement Net Zero and Carbon Neutrality Environmental Impact Goals and Targets Social Impact Goals		
2-25	Processes to remediate negative impacts	Diversity, Equity, and Inclusion (DEI)		
2-26	Mechanisms for seeking advice and raising concerns	Ethics and Compliance		
2-27	Compliance with laws and regulations	ESRT Version 2.0		
2-28	Membership associations	Leadership		
2-29	Approach to stakeholder engagement	Social Responsibility		
GRI 3: Mate	rial Topics			
3-1	Process to determine material topics	Materiality and Stakeholder Engagement		
3-2	List of material topics	Materiality and Stakeholder Engagement		
GRI 200: Ec	onomic Standards			
201-2	Financial implications and other risks and opportunities due to climate change	Climate Change and Resilience		
202-2	Proportion of senior management hired from the local community	100%		
205-2	Communication and training about anti-corruption policies and procedures	Ethics and Compliance		
GRI 300: Environmental Standards				
GRI 302: Ene	GRI 302: Energy 2016			
302-1	Energy consumption within the organizaiton	Energy Performance		
302-3	Energy intensity	Energy Performance		
302-4	Reduction of energy consumption	Energy Performance		



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Disclosure	Title	Reference/Location			
GRI 300: En	GRI 300: Environmental Standards				
GRI 303: Wat	GRI 303: Water and Effluents 2018				
303-1	Water withdrawal by source	Water Performance			
GRI 305: Emis	ssions 2016				
305-1	Direct (Scope 1) GHG emissions	Greenhouse Gas Emissions Performance			
305-2	Energy Indirect (Scope 2) GHG emissions	Greenhouse Gas Emissions Performance			
305-3	Other indirect (Scope 3) GHG emissions	Greenhouse Gas Emissions Performance			
305-4	GHG emissions intensity	Environmental Impact Goals and Targets			
305-5	Reduction of GHG emissions	Net Zero and Carbon Neutrality			
GRI 306: Was	GRI 306: Waste 2020				
306-2	Management of significant waste-related impacts	Waste Performance			
GRI 308: Sup	GRI 308: Supplier Environmental Assessment 2016				
308-1	New Suppliers that were screened using environmental criteria	Vendors and Suppliers			
GRI 400: Social Standards					
GRI 401: Emp	GRI 401: Employment 2016				
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Benefits			
GRI 404: Trai	GRI 404: Training and Education 2016				
404-2	Programs for upgrading employee skills and transition assistance programs	Succession Planning, Learning, and Professional Development			
GRI 405: Diversity and Equal Opportunity 2016					
405-1	Diversity of governance bodies and employees	Diversity, Equity, and Inclusion (DEI)			
GRI 413: Local Communities 2016					
413-1	Operations with local community engagement, impact assessments, and development programs	Community Engagement			

## SASB Index

Code	Accounting Metric	2022 Disclosure	
IF-RE-000.A	Number of assets, by property, subsector	Office: Corporate: High-Rise Office: 10 Office:Corporate: Mid-Rise Office: 3 Standalone Retail: 6 Multifamily: High-Rise: 2	
IF-RE-000.B	Leasable floor area, by property subsector	ESRT's office and retail portfolio is composed of 9.4 million rentable square feet and multifamily portfolio composed of 592,844 rentable square feet or 625 units.	
IF-RE-000.D	Average occupancy rate, by property subsector	e: Corporate: High-Rise Office: 91.82% e: Corporate: Mid-Rise Office: 78.87% dalone Retail: 81.6% family: High-Rise: 100%	
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 2022.	
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 2022 energy consumed by portfolio area with data coverage was equal to 658605.6 gigajoules (GJ). (2) The percentage of total energy corresponding to grid electricity for all property types was 56.24%. (3) The percentage of total energy corresponding to on-site renewable energy for all property types was 0.0%; however, ESRT purchased 12,7459,000 kWh of RECs from wind power to offset our electricity consumption and purchased +9000 acre forest in Ohio reducing annual emissions 137,185 tons of carbon dioxide.	
IF-RE-130a.3	Like-for-like percentage change in energy	Total like-for-like change in energy consumption for the ESRT operational portfolio was 4.14% in 2021-2022.	
	consumption for the portfolio area with data coverage, by property subsector	The COVID-19 pandemic caused a significant reduction of activity in our buildings during 2020 and 2021, resulting in reduced energy consumption. In 2022 commercial occupancy increased 76% over a 5-day average (Monday-Friday) compared to 2021 levels thus increasing our usage.	
IF-RE-130a.4	Percentage of eligible portfolio (1) has an energy rating and (2) is certified by ENERGY STAR, by property subsector	(1) 100% of ESRT's operational office and multifamily portfolio is benchmarked using ENERGY STAR Portfolio Manager. (2) 80% of ESRT's entire portfolio obtained ENERGY STAR Certification, and 92% of the office portfolio obtained ENERGY STAR Certification in 2022.	



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Code	Accounting Metric	2022 Disclosure
IF-RE-130a.5	Description of how building energy management considerations are integrated into property investment analysis and operational strategy	ESRT utilizes RTEM to integrate building energy management considerations into property investment analyses and operational strategy. Real-time energy consumption feedback allows ESRT to realize cost and energy savings opportunities. ESRT has partnered with 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 and Greenhouse Gas Management Policy entails best practices such as tracking consumption through ENERGY STAR Portfolio Manager, 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 as 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. Properties who have completed a Level 2 audit can also conduct an ASHRAE Level 3 audit.
Water Manag	ement	
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 2022 (2) 0.0%
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 2022 water consumed by portfolio area with data coverage was equal to 491,491 m3 (2) 0.0%
IF-RE-140a.3	Like-for-like percentage change in water withdrawn for portfolio area with data	Like-for-like change in water consumption for the ESRT operational portfolio was 65% in 2021-2022. The like-for-like change in commercial water consumption for ESRT was 22.94% in 2021-2022.
	coverage, by property subsector	ESRT sold a high-rise office building in Norwalk, Connecticut and acquired two high-rise multifamily buildings in Manhattan over the time period this data reflects. Commercial occupancy increased 76% over a 5-day average (Monday - Friday) and 86% over a 3-day average (Tuesday - Thursday) in 2022 compared to 2021 commercial occupancy
IF-RE-140a.4	Description of water management risks and discussion of strategies and practices to mitigate those risks	ESRT 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 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. 100% of our commercial portfolio has implemented this smart technology. ESRT's performance requirements seek to maintain these baseline requirements and build upon them by setting and tracking performance goals, ensuring that the ESPM profiles are updated and that water conservation best practices are in place, fixing identified leaks, installing high efficiency low-flow fixtures or retrofitting low-flow aerators/fixtures where appropriate and feasible, and engaging with tenants.



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Code	Accounting Metric	2022 Disclosure
Management of Tenant Sustainability Impacts		
IF-RE-410a.1	<ul><li>(1) Percentage of new leases that contain a cost recovery clause for resource efficiency related capital improvements and</li><li>(2) associated leased floor area, by property subsector</li></ul>	(1) (2) 100% of ESRT's new leases for commercial and retail tenants contain cost recovery clauses for energy efficiency upgrades that benefit the tenant. This equates to 1.1 million rentable square feet of newly leased office and retail space covered by such language in 2022. 0.0% of ESRT's multifamily leases contain cost recovery clauses for energy efficiency upgrades that benefit the tenant.
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) ESRT submeters 100% of office and retail tenants for grid electricity consumption across the portfolio. 100% of multifamily tenants are separately metered for grid electricity consumption. (2) ESRT submeters 0.0% of office, retail, and multifamily tenants for water withdrawal.
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 town halls 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 sustainability efforts 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 ESRT properties located in 100-year flood zones.
IF-RE-450a.2	Description of climate change	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 ROI 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 for every property during the due diligence process as well as for standing investments. This assessment includes physical risks such as power interruption, flooding, heat waves, hurricanes, and winter storms as well as 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, wind storm/hurricanes, and freezes/winter storms. In 2022, 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 that ESRT currently has in place, including a formal disaster recovery plan and business continuity plan that have been communicated to employees and tested as well as disaster recovery and business continuity through multiple insurers, which diversifies the risk basis.

## 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 and Management Oversight of ESG		
b) Describe management's role in assessing and managing climate-related risks and opportunities	Board and Management Oversight of ESG		
Strategy: Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's busine information is material	esses, strategy, and financial planning where such		
a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long terms.	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.	Climate Change and Resilience		
b) Describe the organization's processes for managing climate-related risks, such as transition, physical, and social risks.	Climate Change and Resilience		
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		
Metrics and Targets: Disclose the metrics and targets used to assess and manage relevant climate-related risks and oppor	tunities 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.	Climate Change and Resilience		
b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 GHG emissions and the related risks.	Greenhouse Gas Emissions Performance		
c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	Environmental Impact 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 these 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 are including this statement for purposes of complying with those safe harbor provisions. You can identify forward-looking statements by the use of forward-looking 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, dividend policy, and results of operations contain forward-looking statements. Likewise, all of our statements regarding anticipated growth in our portfolio from operations, acquisitions, anticipated market conditions, demographics, and results of operations are forward-looking statements.

Forward-looking statements are subject to substantial risks and uncertainties, many of which are difficult to predict and generally beyond our control, and you should not rely on them as predictions of future events. Forward-looking statements depend on assumptions, data, or methods that may be incorrect or imprecise, and we may not be able to realize them. We do not guarantee that the transactions and events described will happen as described (or that they will happen at all).

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, market, political, and social impact of and uncertainty relating to any pandemic; (ii) 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 reduced demand that is a result of the changes in the use of office space and remote work; (v) changes in our business strategy; (vi) changes in technology and market competition that affect utilization of our office, retail, observatory, broadcast, or other facilities; (vii) changes in domestic or international tourism, including those due to health crises and pandemics, and geopolitical

events, including global hostilities, currency exchange rates, and/or competition from recently opened observatories in New York City, any or 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 current phasing out of LIBOR; (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 budget; (xv) difficulties in identifying and completing acquisitions; (xvi) risks related to any development project (including our Metro Tower potential 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; (xx) incurrence of taxable capital gain on disposition of an asset due to failure of use or compliance with a 1031 exchange program; and (xxi) 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, performance, or transactions, see the section entitled "Risk Factors" of this Sustainability Report.

While forward-looking statements reflect the company's good faith beliefs, they are not guarantees of future performance. The company disclaims any obligation to update or revise publicly any forward-looking statement to reflect changes in underlying assumptions or factors, new information, data or methods, future events, or other changes after the date of this Sustainability Report, except as required by applicable law. Prospective investors should not place undue reliance on any forward-looking statements, which are based only on information currently available to the company.



INTRODUCTION

#### CODEGREEN

#### Third-Party Data Verification

From: Justin Stephens, CodeGreen Solutions To: Dana Schneider, Empire State Realty Trust

Date: April 14, 2023

RE: Third Party Verification – Limited Assurance

#### Scope

CodeGreen Solutions has conducted an independent third-party review of Empire State Realty Trust's (ESRT) 2022 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 13 office and 2 multi-family properties within ESRT's operational control. This statement should not be relied upon to detect all errors, omissions, or misstatements that may exist. This verification scope excludes the 6 retail properties owned by ESRT as they are out of operational control and comprise 2% of ESRT's portfolio by floor area.

#### 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 2022 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 2022 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.

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 drid assertion. We believe our work provides a reasonable basis for our conclusion.				
Data Set	Review Level	Date Range		
Energy Consumption	Limited Assurance	Jan 1, 2022 – December 31, 2022		
GHG Emissions	Limited Assurance	Jan 1, 2022 – December 31, 2022		
Water Consumption	Limited Assurance	Jan 1, 2022 – December 31, 2022		
Waste Generation	Limited Assurance	Jan 1, 2022 – December 31, 2022		

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#### CODEGREEN

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

#### **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 2022 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.

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, 2022 – December 31, 2022
Scopes Covered	Natural Gas, Fuel Oil, Whole Building Electricity and Steam, Tenant Sub-metered/Direct Metered Electricity
Emissions Covered	CO <sub>2</sub> , N <sub>2</sub> O, CH <sub>4</sub>
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	



#### CODEGREEN

Whole Building Total Generated Waste, Total Landfilled Waste, Total Recycled Waste Assurance Criteria used for Verification ISO 14064-3: Greenhouse gases -- Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions (2019)

#### Verification Opinion

Based on our Limited Assurance review of the organizational emission for Empire State Realty Trust from January 1, 2022, to December 31, 2022, 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:

- 44,785 metric tons of CO2 equivalent (CO2e) emissions
- 182,946 MWh of energy consumption
- 491.491 cubic meters of water consumption
- 3,071 metric 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 CODEGREEN



## EMPIRE STATE REALTY TRUST

**ESRT Headquarters** 

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