



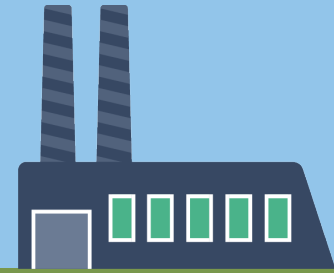
Sustainability Report

January - December 2021

Our sustainability mission is to provide leadership and tools to integrate truly sustainable design thinking into the way we work, through practices that balance cultural, environmental, and economic concerns so that it is no longer considered sustainable design; it is SSOE design.



Sustainable Project Design



8.5 million

square feet of LEED-certified projects designed through 2021, contributing significant savings in water, energy, and construction waste

\$72.5 million

savings accumulated from 2010 through 2021 resulting from SSOE's LEED-certified projects



Water

SSOE is committed to reducing the volume of water utilized in the built environment. We track water usage on all of our LEED projects:

45%

water saved annually per project (average 2011-2021)

10.2MM

gallons of water saved annually

84.4MM

gallons of water saved to date over lifecycle of designed facilities



Waste

SSOE encourages Construction Waste Management Planning on LEED projects. Every ton of waste diverted from the landfill prevents nearly 3 tons of CO₂e from being released into the atmosphere.

GOAL

75%

of construction waste diverted annual average

RESULTS

84%

of construction waste diverted (LEED projects)

168,747

tons of construction waste diverted to date



Energy

Saving energy reduces greenhouse gas emissions and it makes sense from an operational standpoint as well.

29%

energy saved annually per LEED project (average 2011-2021)

\$8.5MM

annual documented energy savings

672,748 MMbtu

total energy saved annually

5,893,176 MMbtu

energy savings accumulated to date over lifecycle of designed facilities

311,808 Metric Tons

of CO₂e reduced annually, which is equal to 39,276 homes' energy use for one year. SSOE documented LEED projects saved enough energy to power every household in Troy, Michigan (31,410 in 2019)

Sustainability Inside SSOE

Our Sustainability Vision Statement: We are the internationally ranked architecture and engineering firm that strives to leave green footprints around the world. We aim to provide design solutions that demonstrate value by thoughtfully embedding projects with sustainable materials and methods that reduce overall carbon footprint, improve wellness, and build in resiliency.



SSOE is committed to transparency and driving sustainable economies. On Earth Day (April 22, 2022), SSOE submitted its commitment letter to [SBTi Business Ambition Pledge](#). We also signed on to the [Architecture 2030 challenge](#). SSOE's participation in these "Race to Zero" initiatives reinforces our commitment to our clients, colleagues, and communities.



Building upon the mechanical systems controls and LED lighting upgrades at our SSOE Headquarters, the rooftop HVAC system is being replaced at the end of 2022, which will provide anticipated energy savings of over 30%. SSOE continues to review all leasing agreements to ensure water safety, recycling services, and energy efficiency improvement opportunities are addressed upon renewal.



Looking forward. Tracking our GHG emissions allows SSOE to identify operational risks and opportunities. SSOE is committed to set science-based emissions reduction targets* across all scopes in line with 1.5°C scenarios.

Short-term Operational Goals (2021-2023):

- Identify gaps in operational data tracking
- Implement remediation strategies to capture data
- Streamline and automate data collection and reporting
- Improve Scope 3 tracking by requiring data from our purchased goods and services supply chain
- Complete Scope 3 screening
- Submit science-based targets to [SBTi](#) for validation

Short-term Project Goals (2021-2023)

- Focus on design optimization and high performance building design
- Expand project design efficiency tracking
- Identify GHG emissions reduction design opportunities
- Leveraging our human capital and committing to sustainability expertise by growing our LEED AP, CEM, and WELL AP accreditations



Access to clean water is a top priority. SSOE has installed water filters in all of our offices. Water testing, analysis, and remediation (if required) occurs in our offices to ensure confidence in our drinking water supply. Based on our bottle fill counters, SSOE averages 214 water bottles removed from our waste system per person per year, or 216,782 total water bottles for all SSOE employees per year. That is enough to fill 70% of a football field (including the end zones!) Approximately 1.4 gallons of water are required to produce one single serve plastic water bottle, saving approximately 303,495 gallons of water per year.



We continue to find ways to reduce our waste stream by promoting digital documentation, as well as encouraging employees to bring reusable utensils and food containers for meals. We provide employees with reusable water bottles and are removing single serve plastic from our offices. All paper is shredded and recycled. Cardboard paper rolls are donated to the Toledo Zoo for animal enrichment, where they are composted after use. Where we cannot reduce, we recycle and compost, based on office location.

*Targets are considered 'science-based' if they are in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement – limiting global warming to well-below 2°C above pre-industrial levels and pursuing efforts to limit warming to 1.5°C.



Operational Greenhouse Gas Emissions Tracking

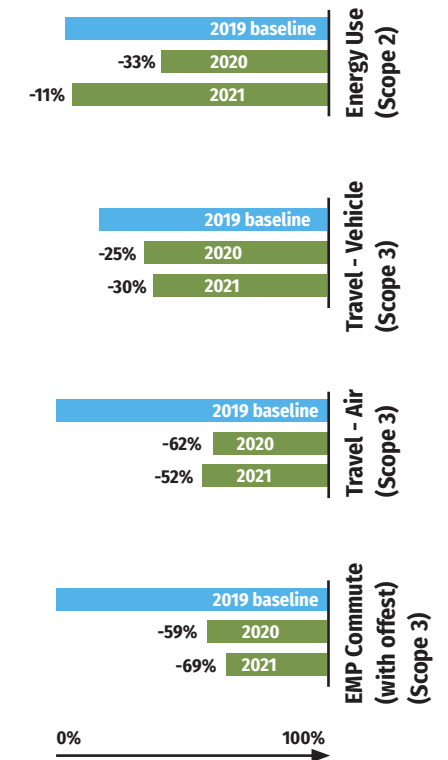
SBTi requires absolute reduction of Scopes 1&2 GHG emissions 50% by 2030 (net zero by 2050).

SSOE is measuring emissions reductions from 2019 baseline year.

SSOE Scope 1 emissions considered immaterial by SBTi (<5% of total Scopes 1&2).

| | 2021 | 2020* | 2019 |
|---|----------------|----------------|-----------------|
| SSOE Number of Employees | 1,133 | 1,013 | 953 |
| SSOE Total Square Footage (All Offices - U.S. & Int'l) | 238,284 | 201,072 | 220,751 |
| MTCO ₂ e / SF Office Space | 0.0060 | 0.0053 | 0.0073 |
| SCOPE 1 - Direct Emissions (Owned) | | | |
| Emergency Generator (Immaterial) | no data | no data | no data |
| Fleet Vehicles | 7.6 | 5.8 | 16.9 |
| Total Scope 1 (% Reduction from 2019 Baseline) | -55.00% | -65.70% | Baseline |
| SCOPE 2 - Indirect Emissions (Purchased Energy) | | | |
| Electricity | 1,160 | 872 | 1,343 |
| Natural Gas | 259 | 201 | 259 |
| Total Scope 2 (% Reduction from 2019 Baseline) | -11.40% | -33.00% | Baseline |
| SCOPE 3 - Emissions (Indirect Value Chain) | | | |
| Business Travel (Air) | 313 | 269 | 712 |
| % Reduction from Baseline (2019) | -56.00% | -62.20% | Baseline |
| Business Travel (Rental + Personal Vehicle) | 376 | 402 | 537 |
| Employee Commuting (U.S. employees only - no WFH included) | 2,943 | 2,591 | 2,606 |
| % Reduction from Baseline (2019) | +12.90% | -0.60% | Baseline |
| Total Scope 3** (% Reduction from 2019 Baseline) | -5.80% | -15.40% | Baseline |
| Total - Scopes 1,2,3 (Calculated) | 5,059 | 4,341 | 7,805 |
| RECs (Purchased Renewable Energy Credits) | *** | -1,073 | -1,602 |
| Plastic Water Bottle Waste Reduction | -7 | -6 | -9 |
| Alternate Transportation (VMT Reduction) | -2,207 | -1,607 | -202 |
| Total Offsets (MT CO₂e) | -2,214 | -2,686 | -2,155 |
| Total Carbon Footprint (Calculated MT CO₂e) | 2,845 | 1,655 | 5,650 |
| MT CO ₂ e / Employee | 2.50 | 1.60 | 5.90 |
| Economic Value Equivalent \$50/MT CO ₂ e | \$142,250 | \$82,750 | \$282,500 |
| % Reduction from Baseline (2019) | -49.60% | -70.70% | Baseline |

Tracking Our Progress (from 2019 baseline year)



*2020 data impacted by COVID-19. **Scope 3 GHG emissions will grow with expanded data collection / reporting.

***RECs not purchased for offset.