OPS Environmental Stewardship Plan - Summary of Discovery Results

January 2022

The process to create a plan for improved environmental stewardship, in accordance with the OPS Strategic Plan of Action, began in fall 2021 with a Discovery phase. This phase included:

1. Summarizing historical environmental stewardship efforts at OPS
2. Peer/industry research
3. Interviews with key leaders at OPS
4. District-wide survey
5. Completion of a greenhouse gas (GHG) inventory
6. Updates to key indicator baselines through ongoing energy, water, and waste data analysis
7. Environmental Stewardship Plan (ESP) Taskforce visioning exercise

This document summarizes outcomes from the above activities and outlines next steps.

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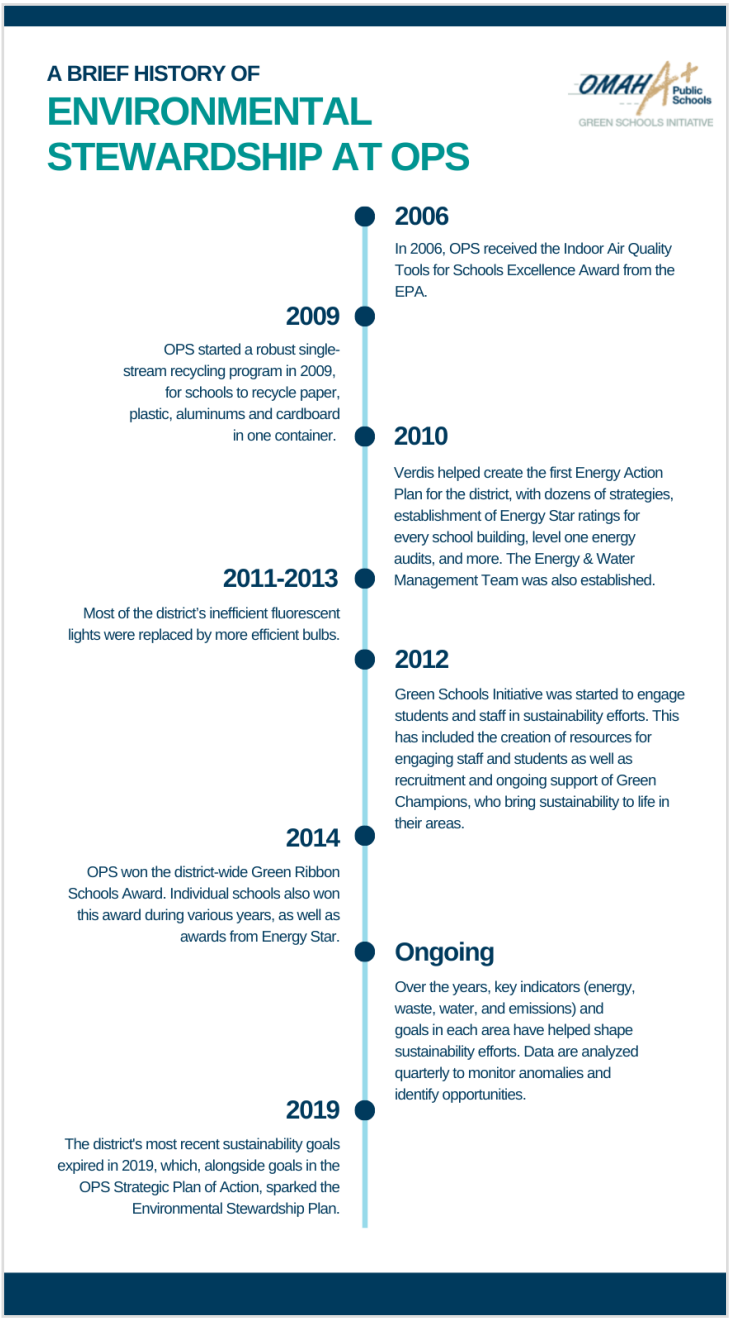
History of Environmental Stewardship at OPS

The history of environmental stewardship/sustainability efforts at Omaha Public Schools dates back at least two decades and includes parties within and outside the district. The district has implemented a range of strategies for energy and water efficiency and waste reduction in particular. Verdis Group has been a partner on these efforts since 2009.

Over the course of the past 10 years, energy efficiency strategies have cumulatively saved the district over $14.5 million in avoided costs. Dozens of schools now have real-time energy monitoring systems that help the district determine when and where energy is being used so that conservation strategies are targeted. LED lights are the norm in new renovations and new buildings. The district's Energy & Water Management Team is focused on monitoring energy use and providing direction and solutions to schools for continued conservation. Guidelines and toolkits for schools - from waste signage to classroom efficiency checklists - have been developed and refined throughout the past few years and are available on the internal OPS website.

To the right is a timeline that summarizes some of the key actions the district taken since 2006.



Peer/Industry Research

Research on peer sustainability efforts and industry frameworks was conducted in order to ensure that the process and outcomes of the Environmental Stewardship Plan (ESP) align with the K-12 context. Information available from the following peer school districts regarding goals, focus areas, and strategies was reviewed:

- Lincoln Public Schools (geographical peer)
- Millard Public Schools
- Des Moines Public Schools
- Denver Public Schools
- Wichita Public Schools
- Oklahoma City Public Schools
- Saint Paul Public Schools
- Seattle Public Schools (aspirational peer)

Other sources of industry research included:

- Green Ribbon Schools (National and Nebraska DOE program)
    - Highlight reports
- Center for Green Schools
- LEED Schools

Key Findings

1. **Goal and strategy information was not readily available for many school districts.**
   Goals available:
    - Seattle Public Schools - Carbon neutrality by 2030
    - Saint Paul Public Schools - Reduce greenhouse gas emissions 45% by 2030

2. **Areas of focus and strategies were similar across districts.**
   Areas of focus for most school districts included:
    - Energy efficiency
    - Renewable energy
    - Water use
    - Waste/recycling
    - Applied education opportunities (i.e., outdoor learning, gardens, curriculum and STEM integration)

   Peer focus areas reflect frameworks commonly used within the K-12 industry - namely, the Green Ribbon Schools pillars, which can be seen as the industry standard:
    - **Pillar One**: reducing environmental impacts, such as waste, water, energy, greenhouse gases, and transportation, encompassing the areas of school facilities, grounds, and operations;

- **Pillar Two**: improving health and wellness by promoting a healthy physical environment (including aspects such as air quality, contaminant control, moisture control, acoustics, daylighting, pest management, and thermal comfort) and student and staff wellness practices (such as healthy school food and outdoor physical activity); and
- **Pillar Three**: offering effective environmental and sustainability education, including civic learning, green careers, and STEM connections.

3. **There is a wealth of resources available for implementing strategies within these areas, particularly from the Center for Green Schools.**
   These resources, especially information regarding funding mechanisms (some of which are unique to school contexts), will be leveraged to develop implementation plans.

Interviews

Eleven individuals were interviewed about their views on environmental stewardship and their vision for the future of OPS:

1. **Dr. Cheryl Logan**, Superintendent
2. **Charles Wakefield**, Chief Operations Officer
3. **Jeramie Cobb**, Director of Operations
4. **Dr. Fateama Fulmore**, Chief School Improvement and Accountability
5. **Susan Christopherson**, Director of Secondary Education
6. **Scott Roberts**, Chief Financial Officer
7. **Cecil Hicks**, Chief Talent Officer
8. **Lisa Utterback**, Student and Community Services Chief Officer
9. **Ayanna Boykins**, Economic Inclusion/Workforce Administrator
10. **Darwin Rohde**, Director of Buildings and Grounds
11. **Matthew Ray**, Secretary to the Board of Education

Questions asked and key themes from responses are outlined below.

Connection to OPS Mission

How do you see environmental stewardship connecting to OPS' mission, vision, and values?

Preparing students to succeed, in both career and life, involves preparing them for the changes that will come with an ever-changing world, which includes a changing climate. Stewardship of resources is connected to students' success in school as well as their family and health outcomes. Students will not be able to thrive if OPS does not care for the environment they will be living in. Students' experience at OPS should help them navigate the challenges that will come with environmental change. Academic and career opportunities will be shaped by these changes, and connections to these opportunities can be made now.

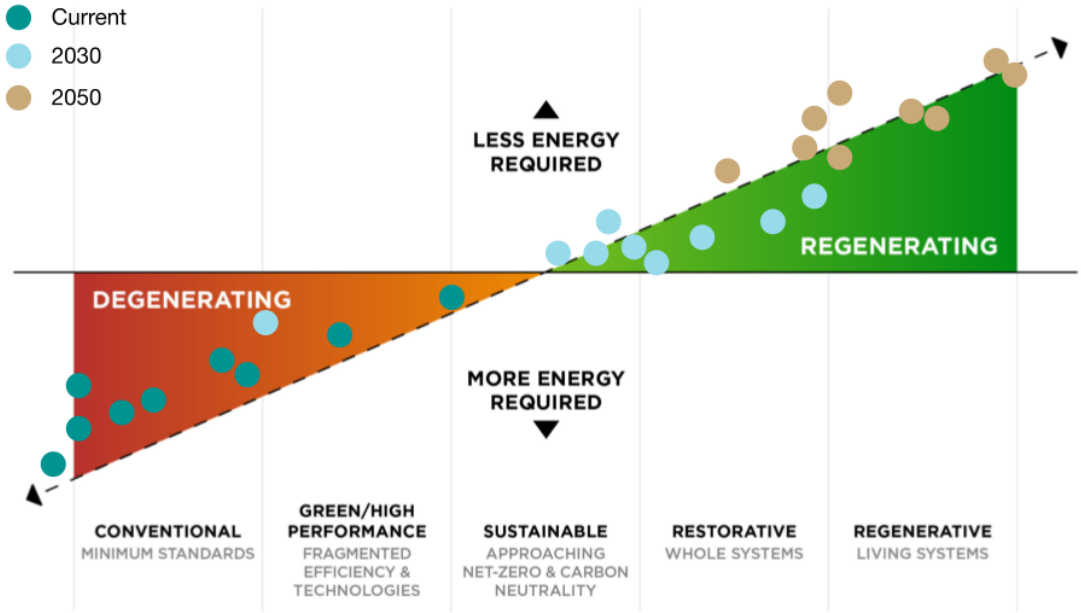
Climate impacts will cause disruptions for OPS as an organization. In 2021, there were 10 disruptions due to climate, including power outages, floods, weather events, etc. As an organization, OPS needs to adapt to meet the needs of current and future students and community stakeholders.

Teaching and modeling environmental stewardship to OPS students creates a culture of responsibility and connects students to a broader worldview. Environmental stewardship means incorporating good practices into everyday norms, and teaching students to be good stewards aligns with being responsible in other ways. If students understand that individuals are responsible for making the world a better place, they will be more successful in their job and life.

Vision for the Future

Where is OPS currently on the regenerative spectrum? Where should OPS be in the future?

The regenerative spectrum is a framework for thinking about design and development - from business-as-usual approaches that extract from the environment, to practices that consider the whole system and ultimately have a positive impact on the environment. The spectrum is used to visualize the range of possibilities for an organization's impact on the environment. Interviewees were shown a blank version of the spectrum below and asked to identify three locations along the line: where they think OPS is currently, where they would like to see the district in 2030, and what they hope to achieve by 2050. Each dot represents one interviewee's response, color coded as shown.



Keys to Success

Get buy-in by educating and communicating the importance of the work. Connect environmental stewardship to climate impacts that everyone experiences and communicate the importance of taking action. Help everyone - students and employees - see their role in it and engage people throughout the process to create champions who can help make this shift.

Take a systems approach that makes environmental stewardship a priority and keeps it front of mind. As a district, incorporate environmental stewardship into all practices and departments such that it is embedded in the way the district operates on a daily basis. Ensure that actions taken will have a replicable, long-term impact that will be sustained across the district over time.

Make it accessible and manageable. Focus on incremental changes that can be accomplished and that will have a long-term impact, not just what's happening right now. Make it something the district "is" rather than something to "do".

Engage with students. Integrate environmental stewardship into the student experience through pathways, academies, programs, clubs, and other engagement/outreach.

Identify champions. Ensure that there are advocates throughout the district who can help make the shift on a peer-to-peer level. Support these champions - equip them to share the message and education.

Barriers

Financial. There are resource limitations and costs associated with investments in technology, infrastructure, etc.

Political. As a public entity, the content that will be included in the plan will likely elicit feedback from the community. Communication and education will be key.

Lack of understanding/education. People may not understand the issues and the potential impacts of climate change, or they may not see why environmental stewardship needs to be a priority at OPS.

Resistance to change. There are often people who are afraid to grow and shift and who see environmental stewardship as "one more thing I have to do".

Survey Results

Full report

A district-wide survey was conducted in December 2021 to collect information from OPS employees about their views on and engagement with environmental stewardship efforts at the district. The survey was developed by Verdis Group over many years and can be used to generally compare within an organization over time as well as across organizations with whom the survey has been conducted.

The survey uses five questions to assess five dimensions of engagement, which culminate in an overall "score" (1-100) that can be used as a metric to measure progress in this area over time.

Key Findings

- **Overall score of 46,** calculated as the average of five dimensions:

Dimensions	2021
Awareness of Efforts (very/moderately aware) at the organization to be better stewards of the environment	23
Knowledge (very/moderately knowledgeable) about ways to be a better steward of the environment at work	59
Behavioral Frequency (always/most of the time) self-reported key environmental stewardship behaviors	67
Perceived Norm (always/most of the time) perceptions of how often others engage in key behaviors	35
Awareness of Environmental Stewardship (very/moderately familiar) familiarity with the concept of environmental stewardship	46
Overall Score	**46**

- **81%** of respondents believe it is **important** for OPS to take active steps toward environmental stewardship
- However, only **56%** believe environmental stewardship **aligns with the district's mission** to prepare students for success in college, career, and life, which does not align with interview findings
- **20%** of 9,000 employees participated in the survey
- Only **23%** of respondents were very or moderately aware of district efforts, but many more were knowledgeable about sustainable or environmentally-friendly personal

practices (**59%**) and indicated that they participate in key behaviors to be better stewards of the environment (**67%**)
- **Waste management** is one of the top areas where respondents see both successes and opportunities, and want to see it as an area of focus

Key Indicator Baselines

The ESP will include goals within the following metrics to measure progress toward improved environmental stewardship. Baselines shown in this section will inform goal-setting as well as strategy development and prioritization.

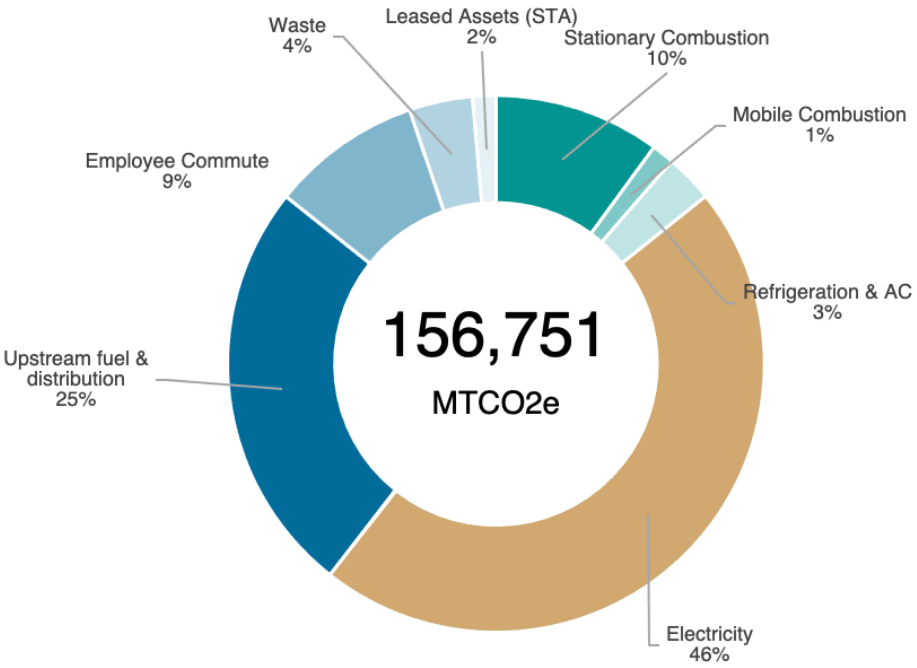
Key Indicator	Metric(s)
Greenhouse gas emissions	**Total emissions**: as calculated in GHG inventory Transportation sub-metrics (will be reflected in the emissions value, but will be monitored separately to support implementation efforts): • **Commute mode split**: Percentage of employees who travel to work using a mode of transportation other than driving alone in a car (i.e., biking, walking, taking public transportation, or carpooling) • **Fleet makeup**: TBD
Building energy consumption	**Energy Star rating**: benchmark based primarily on energy consumption (electricity, natural gas, etc.)
Waste reduction	**Diversion rate**: percent of materials that are diverted from the landfill through recycling, composting, reuse, or source reduction
Water use	**Water consumption per occupant**
Engagement	**Engagement Survey score**: calculated from five survey questions about awareness, knowledge, and behavior at OPS around environmental stewardship

Greenhouse Gas Emissions

A greenhouse gas (GHG) emissions inventory[1] was completed for OPS, covering emissions associated with **Scope One** (direct, onsite), **Scope Two** (from electricity consumption), and **selected Scope Three** (indirect emissions from leased assets, upstream fuel and distribution, employee commute, and waste) for 2019 and 2020. The table on page 10 provides a description of what is included in each scope.

[1] Greenhouse gas inventory: a list of emission sources and the associated emissions quantified using standardized methods (EPA)

The 2019 inventory is being used to set a baseline (rather than 2020) due to COVID-19-related anomalies (i.e., sharp decreases in energy use while buildings were unoccupied). Below are the full results of the inventory. OPS produced 156,751 metric tons of carbon dioxide equivalent[2] ($MtCO_2e$) greenhouse gas emissions in 2019. The primary source of emissions is electricity consumption for building operations (46%).



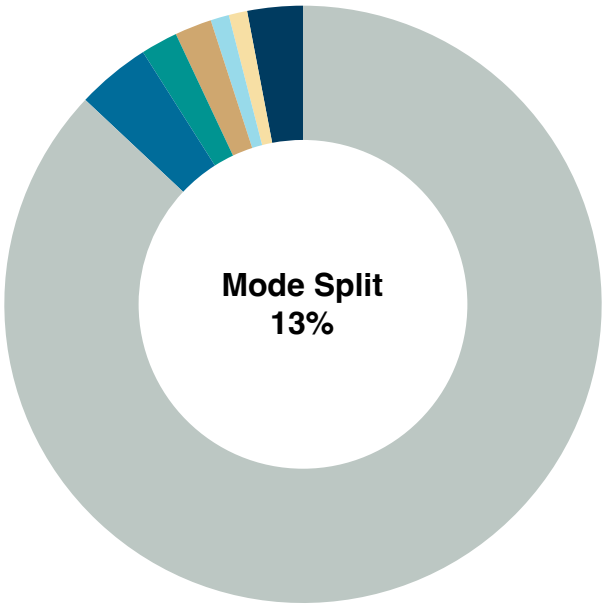
Scope	Category		2019	2020
Scope 1	Stationary Combustion	Combustion of fuels in stationary sources (e.g., boilers, furnaces)	15,724	13,649
	Mobile Combustion	Owned vehicle fuel consumption	2,113	3,894
	Refrigerants	Use of refrigeration and air conditioning equipment *Note: emissions estimated as a % of scope 1 and 2. Actual data not available.*	4,525	3,804
Scope 2	Electricity	Generation of purchased electricity that is consumed onsite	72,656	58,542
Scope 3	Upstream Fuel & Distribution	Extraction, production, and transmission of energy	39,346	31,447
	Employee Commute	Based on mode split	14,210	
	Waste	Methane from landfill	5,991	
	Leased Assets	Operation of assets leased to a third party (Student Transportation of America)	2,187	2,140
		Total	**156,751**	**113,475**

[2] Carbon dioxide equivalent (CO_2e) is used to express emissions from different greenhouse gases (e.g., methane and nitrous oxide) in a common term, taking into account that some gases are more powerful than others.

Mode Split

Emissions from employee commuting are included as transportation emissions in the GHG inventory, but will also be tracked separately as a metric called “mode split” to help inform active commuting strategies. Mode split is the percent of trips employees make to work using a mode of transportation other than driving alone in a vehicle (i.e., biking, walking, taking public transportation, or carpooling) in a typical week.

As of December 2021, the district’s mode split is **13%**. In other words, 13% of employees get to work in a way other than driving alone in a car. See below for a full breakdown of transportation modes used by survey respondents.

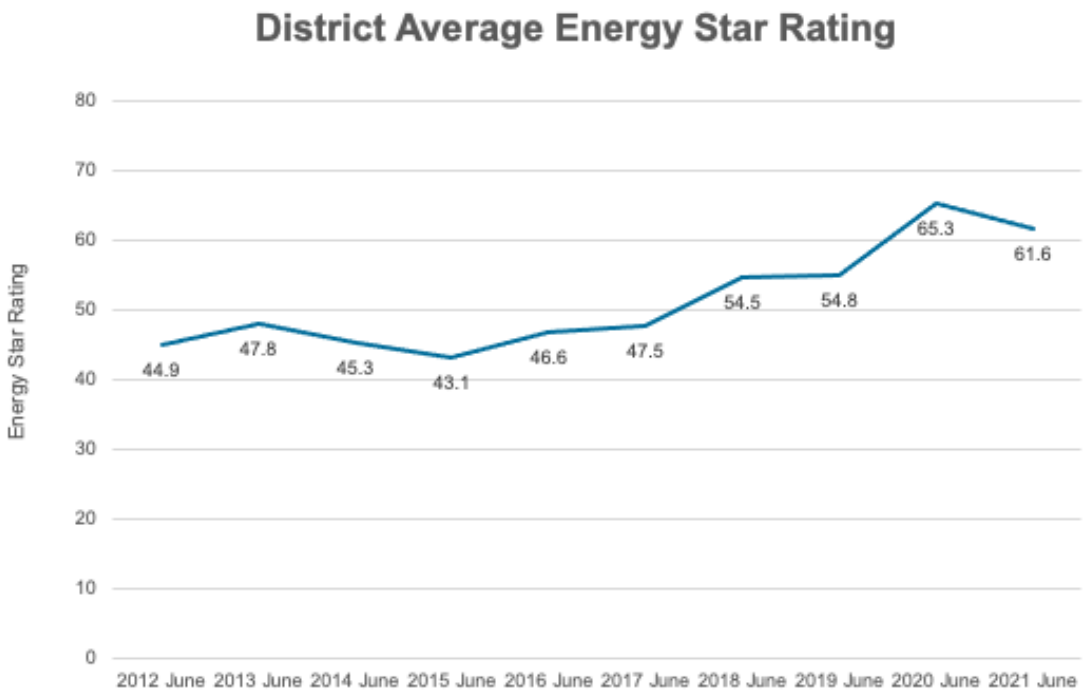


	Drive alone	87%
	Carpool	4%
	Walk	2%
	Work remotely from off-site	2%
	Bike	1%
	Bus	1%
	Other (motorcycle, scooter, moped, taxi)	3%

Energy Star Rating

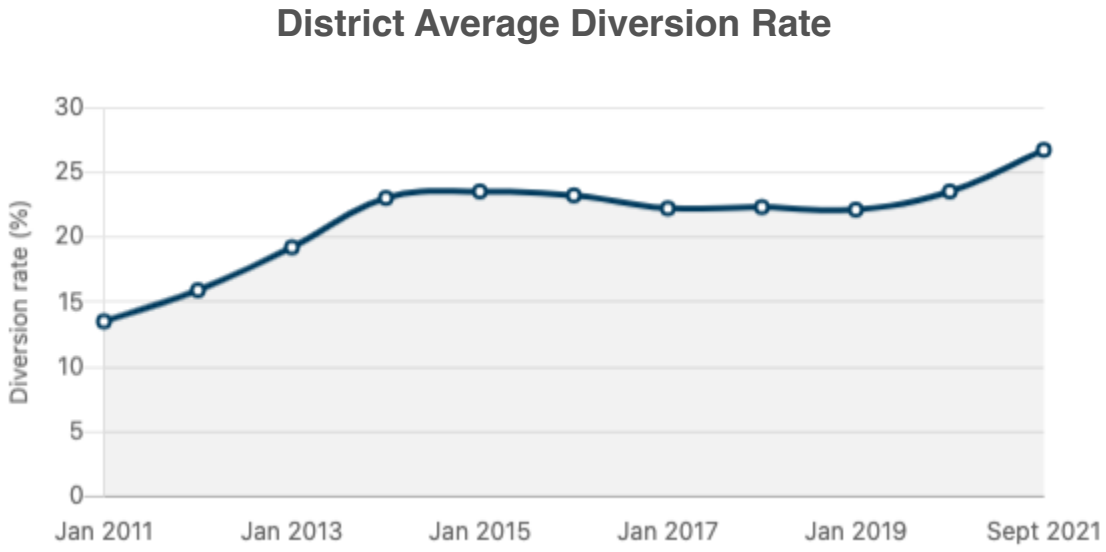
The objective of the Energy Star rating system is to “provide a fair assessment of the energy performance of a property relative to its peers, taking into account the climate, weather, and business activities at the property” (source).

District Energy Star rating is calculated based on energy consumption (electricity, natural gas, etc.) and other factors and is reported on a 12-month rolling basis. As of June 2021, the district’s rating is **61.6**.



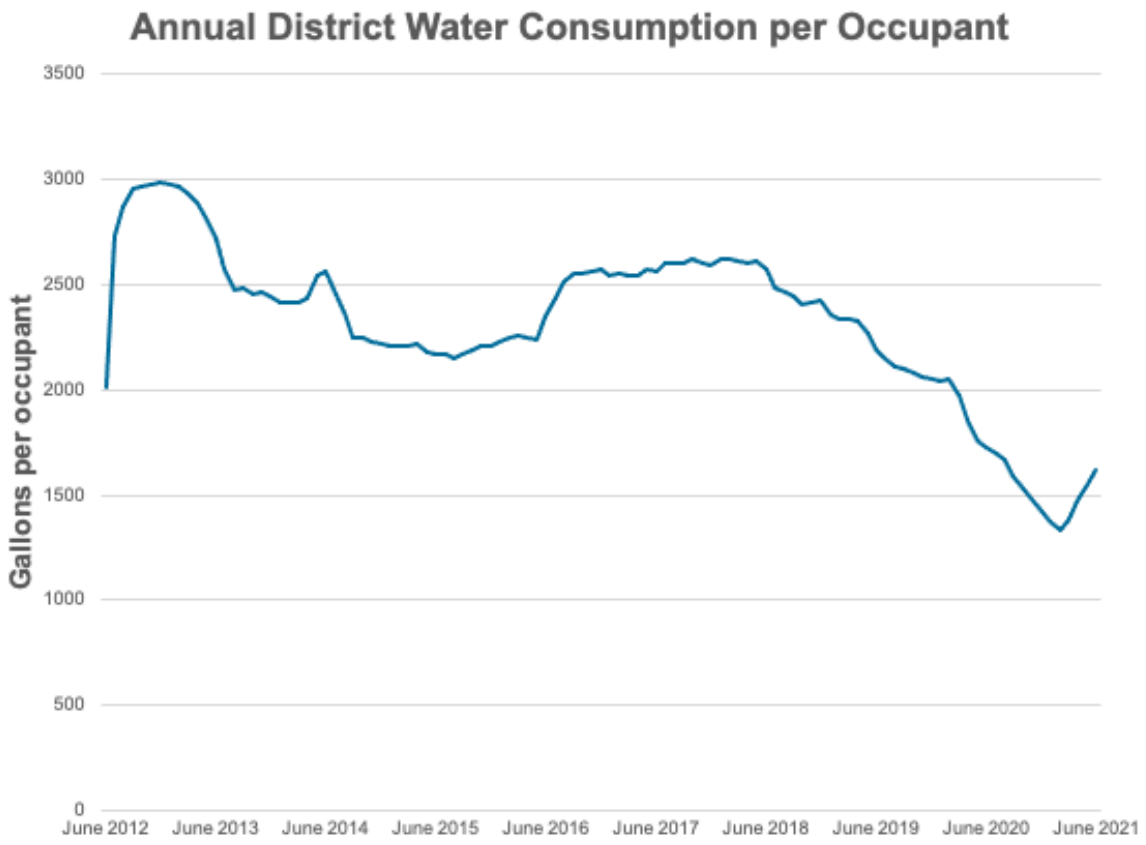
Waste

Diversion rate is calculated by dividing the percentage of material not sent to the landfill by the total waste for the district. As of September 2021, the district diversion rate is **27%**.



Water

Water use per occupant is used to measure progress for this key indicator. As of June 2021, district water use is **1,616 gallons per occupant**.



Engagement

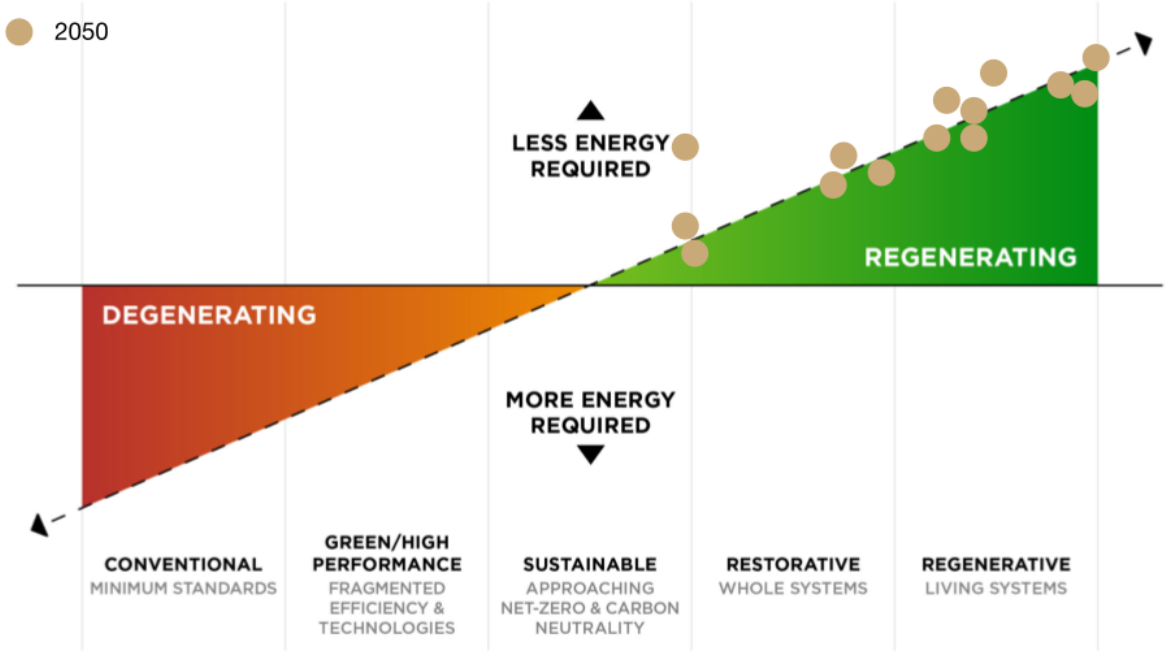
As of December 2021, the district's baseline Engagement Survey score is **46.**

The survey uses five questions to assess five dimensions of engagement, which culminate in an overall "score" (1-100). Total score is calculated by taking the average of the five dimensional scores - see Survey Results section for more information.

Environmental Stewardship Vision

Process

On November 29, 2021, the Taskforce met for a two-hour workshop where they participated in several exercises to identify their vision for the future of environmental stewardship at OPS. They were asked to place a dot on the same regenerative spectrum used in the interviews, thinking about their goal for OPS in the long-term future (2050). The results are shown below.



The Taskforce also went through a process to brainstorm, discuss, and organize their ideas for the future of environmental stewardship at OPS. They were asked to think about what success would look like for this project and what they hope to achieve. The results of this exercise were refined into the following vision.

Vision Statement

At Omaha Public Schools, we recognize the connection between our mission to prepare students to succeed and the challenges they will face due to the climate crisis. We believe it is critical to their success and ours as a district to take innovative action to become better stewards of our natural resources, equip our students to overcome environmental challenges, and ultimately become an organization that gives back to our planet and community. This includes taking action to…

Elevate student voices and empower students as leaders.

We seek to create a culture that elevates student voices and supports student-led environmental initiatives. We will partner with community members to connect students with career and educational opportunities related to environmental stewardship.

Cultivate a healthy learning environment through high-performance buildings and thoughtful grounds management.
We will use modern building management systems, real-time analytics, and other advanced technologies to increase energy and water efficiency in buildings and on grounds. We will improve indoor and outdoor air quality and conserve resources through the implementation of integrated pest management and landscaping plans.

Foster a culture of regeneration.
We will work to improve staff and student participation in environmental stewardship initiatives. We will provide accessible education to encourage personal and collective practices that support our sustainability goals at school, at home, and beyond. We will integrate environmental stewardship into daily practices in each department and promote interdepartmental communication and collaboration.

Reduce greenhouse gas emissions.
We will significantly decrease our greenhouse gas emissions by reducing energy usage, procuring energy from clean sources, and producing our own clean energy. We will seek opportunities to reinvest energy cost savings into our buildings and students.

Implement transportation systems that support our emissions goals.
We will increase the number of clean fuel vehicles in our fleet. We seek to reduce the use of cars by all members of the OPS community by promoting alternative modes of transportation, such as walking, biking, and carpooling.

Eliminate waste, from purchasing to disposal.
We will reduce our purchasing and use of materials and reuse or donate items when possible. We will ensure all buildings have proper levels of recycling and composting equipment and education.

Make socially responsible procurement decisions.
We will let OPS values guide our purchases, which means supporting the local community and purchasing from businesses that share those values.

Implement sustainable food practices that support student nutrition.
We will source local and sustainable food in the cafeterias when possible, and we will promote ‘ready access’ to healthy food outside of mealtimes.

Next Steps

Context from each of the areas above will be used to guide the remainder of the process for creating the ESP. Below are the next steps, many of which are currently underway.

Student Engagement

Thirteen students who have expressed interest in environmental stewardship were recruited to participate in a student engagement program during the spring semester. They will be provided the tools and knowledge to visit other schools and present about environmental stewardship to their peers and/or to school administrators. They will also be equipped to speak about the project and environmental issues with other students, friends, and their families. Ultimately they will be asked to provide a summary report of their conversations, which will inform the plan.

Focus Teams

Focus Teams will be convened around seven key topic areas covering the subtopics listed below.

- Buildings (Interior)
    - Energy efficiency
    - Renewable energy
    - Green technology
    - Water efficiency
    - Indoor air quality
    - Facilities Assessment
- Transportation
    - Buses
    - Fleet
    - Mode split (employee and student commuting)
- Waste/Recycling
    - Waste reduction
    - Recycling
    - Composting
- Purchasing
    - Social responsibility
        - Local community/businesses
        - Shared values
        - Companies that have sustainability goals
    - Materials/disposal (i.e. compostable, less packaging, etc.)
- Grounds (Exterior)
    - Landscaping
    - Pest management

    - Outdoor air quality
- Food
    - Sustainable
    - Local
    - Healthy food accessible at all times
- Engagement/Curriculum
    - Communications
    - Curriculum
    - Community relations
    - Student leadership and empowerment

These teams will meet up to four times between February and June to develop strategies that will improve environmental stewardship and drive the district toward the future identified in the vision. These strategies will include everything from energy efficiency upgrades to tree planting plans to student engagement programs. The Focus Teams will also examine data and suggest preliminary goals for the metrics within their purview. The Taskforce will review, refine, and finalize these goals.

Goal Setting

As noted in the Key Indicators section, the Focus Teams and Taskforce will both be involved in helping develop goals for the following metrics, which will help measure progress and success of the ESP:

- Greenhouse gas emissions
    - Transportation sub-metrics will be reflected in the emissions value, but will be monitored separately to support implementation efforts:
        - Commute mode split
        - Fleet makeup
- Building energy consumption
- Waste reduction
- Water use
- Engagement

Strategic directions (as opposed to formal quantitative goals) will be set for the following areas as well:

- Curriculum integration
- Indoor air quality

The Taskforce will meet in March to review outcomes from initial Focus Team meetings and set goals. Draft goals will be released for community feedback.

Creation of Plan

The strategies and goals developed by the Focus Teams will be compiled and refined into a draft plan. Along the way, there will be opportunities for the public, the Board of Education, and OPS stakeholders to share feedback and ask questions. The plan will be presented to the Board during the summer of 2022 and will be finalized following approval. Implementation will begin during the 2022-23 school year.