

Seattle Children's

# Strategic Sustainability Plan

March 4, 2019

**People. Planet. Promise.**



# A History of Environmental Leadership

## Background

Seattle Children's has long been a leader and a believer in sustainability, and we are proud of the work we have already accomplished in many areas like recycling, transportation and green building. As one of the first medical centers in the country to apply the methods and scientific rigor of the Toyota Production System to healthcare, Children's has adapted the method as an organization-wide philosophy and improvement approach called Continuous Improvement and Innovation (CII). Removing waste in our systems is an extension of our CII work.

Our Sustainability program is aligned with our Mission to provide hope, care and cures to help every child live the healthiest and most fulfilling life possible. We know that healthy children require a healthy environment to thrive. From two LEED Gold Certified buildings to our world class transportation program, we have significantly reduced our carbon footprint and contribution to global greenhouse gas emissions. Our Mission Nutrition program has minimized sugar sweetened beverages to help in the efforts to reduce childhood obesity; pursued local and sustainable food purchasing; created an onsite organic garden to provide food for our kitchen operations and food pantry; and led us to be the first hospital in the region to compost food waste in our kitchen operations. Our comprehensive recycling programs have greatly reduced our overall landfill environmental burden.

Seattle Children's has also made significant environmental commitments as part of our expansion and Major Institution Master Plan with the City of Seattle. These commitments include pursuit of the [2030 Challenge](#), an ambitious program targeting reductions in energy, water and CO2 for new and existing buildings.

In order to meet our environmental commitments and reach our goals through 2030, we need to "Future-Proof" our operations so our leaders in 2030 are not burdened with overwhelming operational and utility costs. Therefore, Children's has a Strategic Sustainability Plan to help safeguard the future health of our patients, families, workforce and local and global community. This plan aligns with Seattle Children's vision and strategic plan by focusing on safety, employee engagement, community health and lower operating costs so we may continue our founding promise to care for every child in our region, regardless of their family's ability to pay.

To deliver on that commitment we have also moved beyond the walls of our hospitals and clinics to the greater community's health. From the neighborhood they live in, to the housing where they reside and the economic circumstances of their family, many of the health outcomes of our patients are products of the Social Determinants of Health (SDH). SDH are made up of multiple factors, and we seek to influence those factors to improve community health.

# Program Highlights

## People

- Anchor Commitment.** Seattle Children's is a member of the national [Healthcare Anchor Network](#), a group of more than 30 leading healthcare systems committed to building more inclusive and sustainable local economies. Our Strategic Sourcing team analyzed our purchasing data and determined our baseline for diverse spending. For FY18 the team created standard work in our bid process providing opportunities for five diverse vendors. For FY19 they established a financial goal for diverse vendor purchasing, 10% increase with diverse vendors, compared to FY18. Our Human Resources department seeks to diversify our workforce to more closely reflect our patients and families. These Anchor efforts are an effort to infuse our local economy and underserved neighborhoods with income, as the health of children is so closely tied to the economic health of their family and community. Our Anchor commitment aligns with our Strategic Plan to focus on community health.
- Green Team Inclusion Network.** Our team of staff dedicated to sustainability has grown from 20 participants in 2016 to more than 230 members today. They bring our sustainability work to their departments and beyond by participating in tree planting and neighborhood park clean ups. We celebrated our 2018 "Earth Month" with a presentation on research into the pediatric health effects of BPA and Phthalates.
- Healthy Food.** Our Nutrition team has increased our local food purchasing to 19% and our sustainable food purchasing to 22% with a goal to increase both by 15% year over year. Our meat purchases are 67% antibiotic-free to mitigate the widespread and prolific use of antibiotics in the raising of livestock. The team works with Dr. Scott Weissman, our antimicrobial steward, on goals and communication of this program.



## Planet

- Leaner Energy.** Seattle Children's has a goal to decrease our total energy usage 3% annually, and were successful in 2018. We have a 2020 Action Plan to assist our journey to reduce 20% by 2020 compared to a 2012 baseline. We have a Certified Energy Manager, Jeff Grinzel, PE, to analyze and optimize our building operations.



- **Paper Reduction.** Copy paper production uses large amounts of resources such as trees and water and produces greenhouse gas emissions. Further, the production of paper produces fine air particulates in the air we breathe, which can trigger asthma. Once we learned that our paper consumption was putting almost 1,000 pounds of these fine air particulates into our northwest air, we made a commitment to reduce our usage. The whole organization has contributed to a 12% reduction in copy paper usage since 2014, despite growth in services and staff.
- **Waste - Landfill Diversion.** Seattle Children's has a comprehensive recycling and composting program meant to decrease the percentage of our waste sent to the landfill. Since 2014 we have reduced the percentage of our waste sent to the landfill from 58% to 54% and increased recycling from 35% to 39%.
- **Climate Change Mitigation.** With a 24/7 operation, hospitals are large consumers of energy, which produces carbon and greenhouse gas emissions. And as one of the largest employers in any community in which they are located, the commuting of staff also contributes to the emissions associated with transportation. We have a world class transportation program that promotes alternative transportation. In 2018 we avoided more than 3,600 metric tons of carbon equivalent by our employees biking, carpooling, taking transit and walking to work. In 2018 we began a partnership with Forterra's [Evergreen Carbon Capture](#) program to annually offset 10% of our Scope I & II emissions. These trees will capture carbon during their lifetimes that will offset our emissions.



## Promise

- **Lower operating costs.** All of our sustainability initiatives aim to be cost neutral and reduce operating costs - but large cost savings require large capital investment. The Infrastructure Upgrade project will replace or renovate major capital equipment that is critical to hospital operations but considered high risk due to age or condition. As we update our Building Operations System (BAS) and change our central boilers to highly efficient gas condensing boilers, our energy usage will improve. And as we integrate these energy saving goals to all our staff through education and communication, we will further reduce operating costs and increase employee engagement in our environmental commitment.

## Current State, Goals and Strategies

Current State	Goals	Strategies
<p><b>Energy Use:</b> 317 million kBtu 6% reduction</p> <p><b>Energy Cost:</b> \$3.95 million</p>	<p><b>2020:</b> 20% Reduction (EUI)</p> <p><b>2030:</b> 50% Reduction (EUI)</p>	<ul style="list-style-type: none"> <li>- M&amp;V</li> <li>- 2020 Action Plan</li> <li>- Operational Improvements</li> <li>- Capital Investment</li> <li>- Alternative Energy</li> </ul>
<p><b>Waste:</b> 4.7 million pounds 41% diversion</p> <p><b>Waste Cost:</b> \$951,088</p>	<p><b>2020:</b> Waste Diversion 50%</p> <p><b>2030:</b> Waste Diversion 70%</p>	<ul style="list-style-type: none"> <li>- M&amp;V</li> <li>- New Bin Signage</li> <li>- Patient Room Recycling</li> <li>- Housewide Composting</li> <li>- Organizational Improvement</li> <li>- Staff Ed. &amp; Communication</li> </ul>
<p><b>Food:</b> 19% local 22% sustainable 67% meat without antibiotics</p>	<p><b>2020:</b> 100% AB-Free Meat ↑ Local/Sustainable 15% year over year</p> <p><b>2030:</b> Sustain an on-site farm to support our kitchen operations and food pantry.</p>	<ul style="list-style-type: none"> <li>- Quarterly KPI tracking</li> <li>- Create partnerships</li> <li>- Vendor relationships</li> <li>- Strategic purchasing</li> </ul>
<p><b>Water:</b> 52.9 million gal 2% reduction</p> <p><b>Cost:</b> \$1.24 million</p>	<p><b>2020:</b> 20% Reduction</p> <p><b>2030:</b> 50% Reduction</p>	<ul style="list-style-type: none"> <li>- M&amp;V</li> <li>- 2020 Action Plan</li> <li>- Operational Improvements</li> <li>- Capital Investment</li> <li>- Employee Engagement</li> </ul>

### Conclusion

We have set ambitious goals that will require commitment from all levels at Seattle Childrens - including physicians, leadership and front line staff. Children's is well poised to continue its sustainability leadership and deliver on its founding promise to care for every child that needs us, regardless of their family's ability to pay. The Strategic Environmental Management Plan will help our future leaders continue to meet this fundamental commitment to our community and region.