

2020

Inova Sustainability Report

Connecting your environment and
your health.



Table of Contents

Sustainability at Inova

| | |
|--|----|
| Goals and Progress..... | 3 |
| Sustainability Stoplight Report..... | 4 |
| Environmental Focus Areas..... | 5 |
| Waste Management..... | 6 |
| Environmentally-Preferable Purchasing..... | 7 |
| Sustainable Foods..... | 8 |
| Water and Energy Management..... | 9 |
| Alternative Transportation and Green Buildings..... | 10 |
| Engagement and Climate Health..... | 11 |



Sustainability at Inova

Goals and Progress

SUSTAINABILITY MISSION STATEMENT

Inova is committed to establishing an environment that is safer and healthier for our patients, team members, and community.

SUSTAINABILITY STRATEGIC GOALS

The following strategic goals were established after analysis of Inova's key priorities, current sustainability programming, and related data. The goals will guide Inova's sustainability programming over the next 5 years:

- 1** Reduce our climate footprint and related public health impacts.
- 2** Provide a healthy, productive environment to heal and work.
- 3** Improve operational efficiencies to reduce waste and save resources.
- 4** Green the supply chain by ensuring our products do not pose a risk.
- 5** Engage both internal and external stakeholders to create a network of champions.

2020 Sustainability Accomplishments

Inova's Mission, Vision and Values are at the heart of our sustainability programming. Included below are Inova's collective accomplishments for 2020 as well as opportunities for 2021:

- Inova's Community Supported Agriculture (CSA) initiative delivered over 5,000 bags of local sustainable produce to team members.
- Our food composting pilot at IFOH continued forward, diverting 22 tons of cafeteria food waste to productive uses.
- We hosted sustainability open houses in January 2020 at all Inova hospitals to inform team members about our initiatives.
- We achieved our transportation mandates at IFMC/ICPH and IMVH, which requires a specific percentage of team members to commute via alternative transportation.

2021 Sustainability Opportunities

2020 was a difficult year due to the COVID-19 pandemic. In 2021, the sustainability office will return to normalcy, with emphasis on the following:

- Codify suite of new sustainability goals that are anchored with a SMART greenhouse gas reduction target that is science-based.
- Establish a leadership level sustainability council that is made up of key functional programs in order to fully integrate sustainability across Inova.
- Repurpose team member engagement efforts to include new website update and related electronic efforts. Deploy in-person initiatives as the pandemic subsides and new resources are made available.
- Execute specific carbon reduction projects around electric charging stations, green energy, conservation and alternative transportation.
- Continue external collaborations with local, regional and national organizations in order to expand the message that sustainability is good business and in the best interest of our health.

Inova Health System

Sustainability Stoplight Report



| | | | SYSTEM DATA | NATIONAL AVERAGE | NAT'L 90TH PERCENTILE |
|-----------------|--|--|---|------------------|-----------------------|
| LESS WASTE | | Recycling as % of total waste | 15.95% | 27% | 45% |
| | | RMW as % of total waste | 8.40% | 6% | 2.5% |
| | | Solid Waste as % of total waste | 73.99% | 65% | 62% |
| | | Hazardous as % of total waste | 1.65% | 0.4% | 0.6% |
| GREENING THE OR | | Total savings from reprocessing medical devices | \$627,270 | - | - |
| | | % of cleaning chemical spend on green general purpose, bath, glass, carpet, and floor cleaners | 44% | 42% | 99% |
| HEALTHY FOOD | | % spend on sustainable foods | 18% | 17% | 55% |
| | | % spend on local foods | 4% | 6% | 26% |
| | | % meat raised without ABX | 32% | 17% | 55% |
| | | % spend on healthier beverages | - | 55% | 85% |
| | | % food waste reduction | 0% | 19% | 39% |
| CLEANER ENERGY | | Energy use intensity (EUI) | 289 | 225 | 153 |
| | | % change in EUI from baseline | -18% | - | - |
| | | ENERGY STAR score | - | 61 | 90 |
| | | % offsite renewable energy | 0% | 9.2% | 10% |
| | | % onsite renewable energy | 0% | 0.6% | 0.6% |
| WATER | | Gallons per square foot | 50.97 gal/sq.ft. | 39 gal/sq.ft. | 21 gal/sq.ft. |
| BUILDING | | Building projects pursuing LEED | 4 | - | - |
| TRANSPORTATION | | Alternative transportation mode split | 18% - IFMC 13% - IMVH | - | - |



Environmental Focus Areas

- 1. Waste Management**
- 2. Environmentally Preferable Purchasing**
- 3. Sustainable Foods**
- 4. Water and Energy Management**
- 5. Alternative Transportation**
- 6. Green Buildings**
- 7. Engagement & Climate Health**



Waste Management

Minimizing regulated medical waste (RMW), hazardous waste, and solid waste, while increasing reuse and recycling is crucial to reducing Inova's environmental impact and operational costs.

Waste Management Progress

- Food composting pilot continued at Fair Oaks hospital, diverting approximately 600 lbs of food waste each week.
- Sustainability worked with stakeholders to ensure containers and signage were in place.
- Commingled recycling increased roughly 180,000 pounds due to team member efforts.
- Shredding numbers in line with 2018 again due to accurate reporting.
- Electronics recycling lower than previous year due to reporting challenges.
- Recycling percentage lower this year due to higher hazardous and solid waste generation.
- In partnership with Daniels Health, Inova launched an initiative to reduce RMW waste across the system through a combination of evaluating bin sizes and placement and team member education.

Waste Management by the Numbers

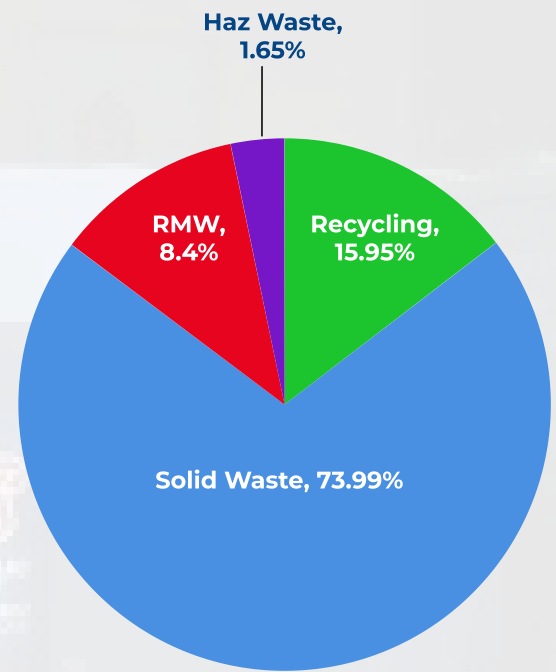
Industry benchmarks for hospitals' waste stream tonnage as a percentage of total are as follows:

- Recycling: 25-30%
- Solid Waste: 60-65%
- Regulated Medical Waste: <10%
- Hazardous Waste: <1%

Compare the above industry benchmarks to Inova's actual 2020 waste stream breakdown, at right. RMW is 8.4%, and Solid Waste is 74%, while Recycling is 16% of total--9% below the industry benchmark. The total waste tonnage for Inova:

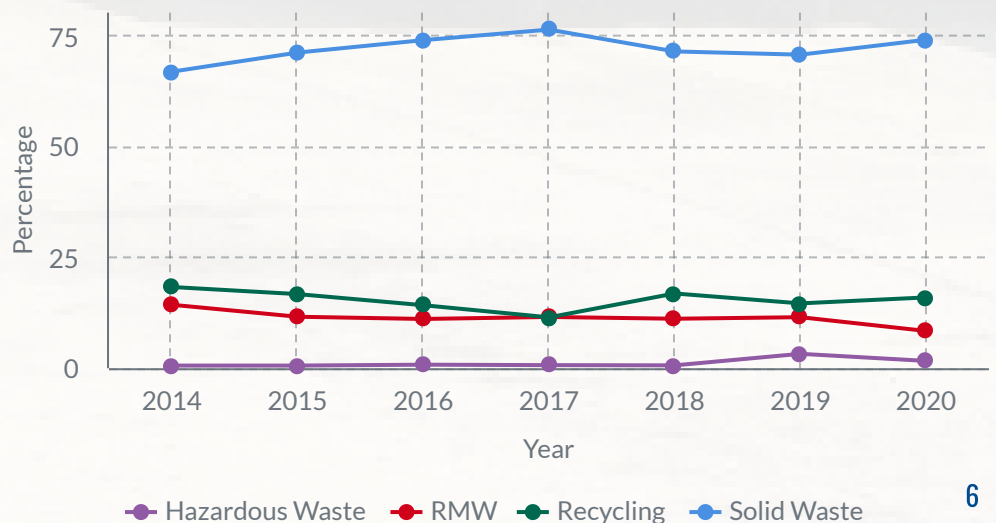
- Recycling: 1,422.71 tons
- Solid Waste: 6,598.03 tons
- Medical Waste: 748.89 tons
- Hazardous Waste: 147.42 tons

2020 Inova Waste Streams



The chart below shows a year over year breakdown of Inova's waste stream percentage trends. Inova's greatest opportunities are in reducing RMW and Municipal Solid Waste while increasing recycling.

Inova Health System Year Over Year Waste Trends



Environmentally Preferable Purchasing (EPP)

Hospital supply chain teams have an opportunity to help shift the healthcare marketplace by using purchasing power to demand safer, healthier, more environmentally preferable products from supplier partners.

Environmentally-Preferable Purchasing Progress

- Inova’s approach to environmentally preferable purchasing includes making progress in key impact areas, including Greening the Supply Chain and Greening the OR.
- Sustainability team collaborated on multiple projects including custom packs, reusable gowns, bed rail handles and more.
- In 2020, Inova doubled its reprocessing savings thanks to its new ultrasonic scalpel and external fixation reprocessing programs.
- In 2021, Inova plans to roll out phase two of reusable isolation gowns throughout the system, which will save many tons of annual waste.

EPP by the Numbers

Single use medical device reprocessing continues to have strong cost savings and remains a core focus of Inova's EPP programming. In 2020, Inova reprocessing savings totaled **\$679,270**. Inova realized an additional **\$11,310** cost savings by diverting **40,199 pounds** of medical waste from area landfills through the reprocessing program.

2020 Inova Reprocessing Data

| | Reprocessing Savings | Waste Diversion (lbs.) | Waste Savings |
|--------------|----------------------|------------------------|-----------------|
| IAH | \$851 | 3,880+ | \$1,162+ |
| IFMC | \$629,692 | 15,590+ | \$4,678+ |
| IFOH | \$17,920 | 5,889+ | \$1,766+ |
| ILH | \$11,277 | 3,703+ | \$1,111+ |
| IMVH | \$19,531 | 821+ | \$248+ |
| Total | \$679,270 | 40,199 | \$11,310 |

Note: SCD sleeve reprocessing data is reported at the system level and could not be split out by hospital. These numbers have been added to the total. The + symbol indicates increased hospital specific numbers.

In 2020, Inova achieved a 44% green cleaning spend rate. Industry benchmarks for green spend on cleaning products suggest a 90% spend compared to the total. The sustainability team and its operational partners will investigate this and related EPP opportunities in 2020.

2020 IHS Green Spend on Cleaning Products

| Green Spend | Conventional Spend | Percentage Green Spend |
|-------------|--------------------|------------------------|
| \$454,441 | \$1,034,697 | 44% |



Sustainable Foods

Inova is committed to procuring and serving nutritious, sustainable foods to improve the health and wellness of both the planet and our patients.

Sustainable Foods by the Numbers

In 2020, Inova continued its partnership with Morrison Food Services. The Office of Sustainability and Morrison team continued quarterly data calls to review Inova's food purchases and convened monthly calls with the hospital food services directors to discuss engagement opportunities. The sustainability team collaborated with Morrison to ensure that specific dairy products achieved rBGH-free certification and growth continued in other sustainability categories.

2020 Sustainable Purchases

| | Total Program \$ | Total Non-Program \$ | % Sust. Spend |
|------------------------------------|------------------|----------------------|---------------|
| Cage Free Shell Eggs (HFAC) | \$60,845 | \$266,118 | 19% |
| Coffee | \$0 | \$137,395 | 0% |
| rBGH-Free Dairy | \$628,085 | \$351,493 | 64% |
| ABX-Free Poultry | \$543,895 | \$457,193 | 54% |
| Sustainable Seafood | \$208,148 | \$5,948 | 97% |
| Cert. Humane/ABX-Free Beef | \$6,475 | \$569,591 | 1% |
| Cert. Humane/ABX-Free Pork | \$0 | \$224,590 | 0% |

Expanding our local food buy in 2021 will consist of our cafeterias increasing sourcing from local farms during the growing season, continuing to offer the Community-Supported Agriculture (CSA) program and Morrison conducting seasonal farmers markets at each hospital site. These initiatives will continue to allow for better health outcomes and reduce environmental impact in support of our organizational values.

2020 Local Food Purchases

| Local Spend | Total Spend | % Local Spend |
|-------------|--------------|---------------|
| \$223,259 | \$10,317,567 | 2.16% |

Sustainable Foods Progress

- In an effort to capitalize on the healing potential of food, the the Sustainability team works with partners to ensure our foods contribute to every patient's journey to peak wellness.
- In 2020, the Inova CSA sold more than 5,000 healthy sustainable food bags in support of team member health and local farms.
- Sustainability team worked to maintain healthy food options and sustainable packaging, addressing supply chain challenges as they arose.
- Pop up retail offerings initiated in all Inova cafeterias, providing necessities to team members in need.
- Local spend increased by \$50,000 in 2020.



Water Management & Energy Efficiency

In maintaining 24-hour operations, healthcare facilities consume large quantities of energy and water. Conserving these resources, and utilizing them more efficiently, is key to Inova's sustainability efforts.

Water Management Progress

- Sustainability, Facilities Management and Engineering work together to implement water conservation practices and efficient equipment.

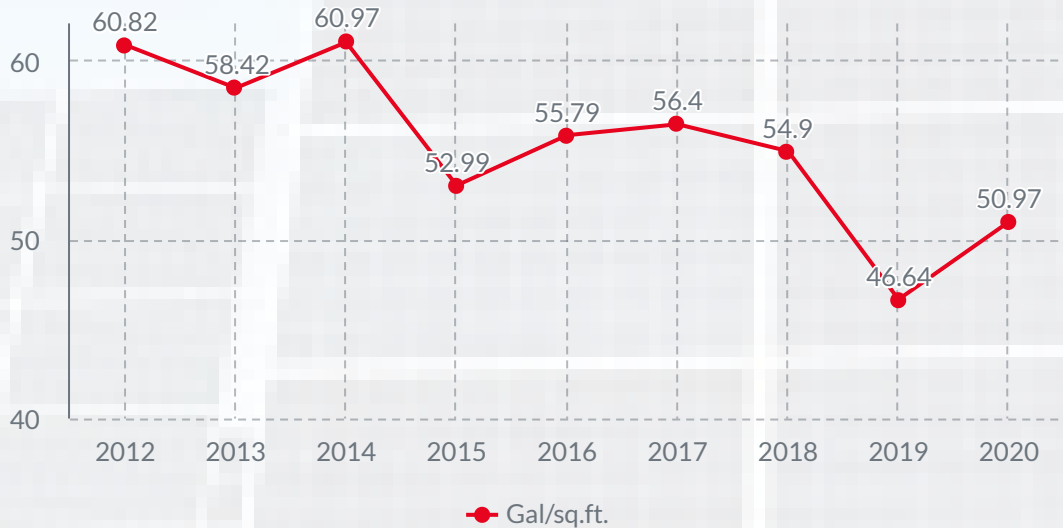
Energy Efficiency Progress

- With an EUI of 283, Inova just missed our 2020 goal of 277, which is a 20% EUI reduction from our 2012 baseline.
- A number of energy saving projects continued in 2020 ranging from new rooftop units, condenser water pumps, Building Automation Systems, air handler replacements, new refrigeration units and ongoing commissioning.
- Energy efficiency initiatives will continue to be incorporated in both renovation projects and equipment replacement to ensure that Inova's energy footprint is reduced.

Water Management by the Numbers

Water management is an essential component of Inova's sustainability program, and we strive to make our water consumption as efficient and sustainable as possible.

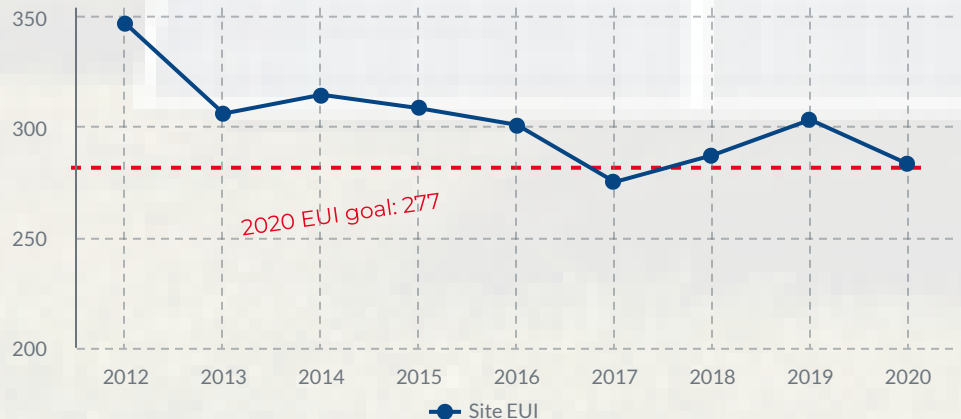
Inova Year Over Year Water Consumption (Gal/sq.ft.)



Energy Efficiency by the Numbers

Inova employs a combination of energy reduction and energy efficiency strategies to reduce our system-wide energy footprint by 20% by the year 2020, from a 2012 baseline.

IHS Year Over Year Site EUI (Energy Use Intensity) Reductions





Alternative Transportation & Green Buildings

Alternative transportation reduces Inova's carbon footprint and positively contributes to better air quality and climate mitigation in our communities. Healthy buildings result in healthier occupants, and we are committed to greening our buildings for patients, visitors, and team members.

Alternative Transportation by the Numbers

In 2020, the Office of Sustainability continued its expansion of alternative transportation programming across the organization. IMVH along with IFMC/ICPH are required to execute transportation demand management programs with 15% and 20% of their team members required to use alternative transportation to get to work. These locations met these requirements again in 2020 and will build on this success moving forward. Additional efforts that took place in 2020 included:

- Promotion of team member-focused commuter offerings including WageWorks (a pre-tax payroll deduction commuter benefit), Inova's formal telework policy, free team member commuter shuttles, bike lockers/showers and preferred carpool parking spots.
- Inova joined the Champions of the Commute, which includes a number of large businesses in the Capital region who's goal is to reduce congestion, improve air quality and make the region a more desirable destination to live, work and play.
- Inova expanded telework options in 2020 for the majority of eligible team members.
- We deployed TransitScreen Software on three video screens in the hospital.
- Inova executed a televisit initiative that had not existed previously. This televisit option is now reaching approximately 40,000 patients each month avoiding 1,500 daily patient trips across all Inova facilities.

Green Building Opportunities

Inova continues to incorporate green and healthy building principles into all renovation projects across the system. Projects include:

- In April 2020, Inova Loudoun opened its new tower, doubling the hospital's capacity to treat patients. The project incorporates a number of green elements including more efficient lighting, new HVAC systems and more expansive natural lighting. Although the project did not pursue a green certification, Inova will certainly benefit from these upgrades in regards to operational costs and more.
- Inova Fairfax continued its OR renovation project, which is projected to achieve LEED Silver.
- Inova recently announced the development of three new major health care facilities in its Eastern Region: Oakville, Springfield and Landmark. The sustainability office, in collaboration with Inova's construction team, is working to make these buildings safe and sustainable. Each facility will achieve LEED Silver at minimum and will strive to electrify most major mechanical systems.

Alt. Transportation Progress

- Emissions from transportation are responsible for 27% of the United States' total greenhouse gas emissions profile.
- This environmental burden translates directly to poor public health outcomes—particularly for Inova's service area. Fairfax, Virginia, received a failing grade for high ozone days in the American Lung Association's 2018 State of the Air Report. As a result, the Office of Sustainability is committed to reducing miles on the road.
- Inova's transportation program complies with local government mandates to reduce single-occupancy vehicle trips. It is also an essential tool for team member engagement and will continue to be enhanced in 2020.

Green Building Progress

- In late 2020, Inova's sustainability manager was certified as a LEED Accredited Professional (LEED AP BD+C).

Team Member Engagement & Climate Health

Team member engagement has a direct impact on staff retention and well-being. A high percentage of workers, especially Millennials, look for opportunities to help their company become more sustainable (Inc. Magazine). A changing climate has the potential to impact the delivery of service through storm-related damage and an increase in climate and health-related admissions.

Team Member Engagement Progress

- 86% of workers believe it is important that their employer is responsible to society and the environment. (55% feeling that it is "very important." (Project ROI)
- 75% of workers would recommend their company if they feel it is environmentally responsible vs. 43% if it is not. (Project ROI)
- Sustainability engagement events across Inova are a great way to support these beliefs and enhance staff retention, recruitment, and well-being.

Team Member Engagement

Team member engagement is always a major focus at Inova, with events and activities at all of our hospitals and various non-hospital locations. Unfortunately, most of these events were suspended during the COVID-19 pandemic. A summary of those activities is listed below.

- Sustainability Open House - In January 2020, the sustainability office hosted a series of open houses at our hospitals to engage team members about our work and the various opportunities to make the system more environmentally friendly. We served local sustainable foods and gave away sustainable prizes such as reusable bags made out of recycled blue wrap and LED light-bulbs.
- GoingGreen Newsletter - Although we were unable to conduct any physical outreach during Inova's pandemic response, we continued our team member outreach via our monthly GoingGreen newsletter, which provides information about healthcare sustainability, local environmental initiatives and more.
- Annual Commuter Survey and Tables - This year's survey reached thousands of IMVH, IFMC, and ICPH team members through a combination of in-person and online responses.
- Waste Diversion Activities - Worked with functional leads and green team champions to address recycling challenges around containers, signage and more. This work will continue in 2021.

Climate Health

Inova's leadership in climate change and public health continued in 2020, with a number of our clinicians continuing to lead the efforts of the Virginia Clinicians for Climate Action (VCCA). VCCA steering committee members and Inova doctors participated in education events around the state as well at internal events at Inova. VCCA members also spent time educating state lawmakers and the general public about the nexus between climate change and public health.

Unfortunately, the sustainability office was forced to suspend its work with George Mason University on a storyboard project featuring a number of Inova Team Members. This initiative was restarted in April 2021.

Climate Health Progress

- The Inova sustainability team participated in Fairfax County's Community-Wide Energy and Climate Plan (CECAP) task force, the county's first effort to develop community-driven climate action goals.