







Message from Inova's CEO

It is with great pleasure that I share with you our sustainability and wellness report for 2016. The report provides a glimpse into our successes over the past year, ranging from operational improvements, to policy developments and stakeholder engagement. This year's report also aligns with the sustainability reporting guidelines established by the Global Reporting Initiative (GRI), and we are proud to be a part of those select organizations that pursue this standard.

Inova's sustainability and wellness programs have and always will play a key role in our delivery of care model. Ensuring that patients and staff are provided with the most nutritional and sustainably-sourced foods, operating our facilities with saving resources in mind, and engaging our staff and business partners are not only the right thing to do but they are also good for our bottom line.

We also know that happy and healthy employees are the lifeblood of any organization. With such high competition for talent in the industry, it is more important than ever to focus on employee well-being. Providing employees with the opportunity to participate and engage in our sustainability and wellness culture will only enhance their Inova experience and allow us to deliver patient-care that is second to none. We will continue to offer new engagement opportunities in 2017 in order to continue having a positive impact on Inova employees, as well as the surrounding Inova community.

I thank all of you for your interest in our sustainability and wellness programs, and look forward to a very productive 2017 as we continue to expand these offerings and shape the future of health.

J. Knox Singleton Chief Executive Officer Inova





Message from Inova's President and COO

Inova continues to integrate sustainability and wellness into all that we do in order to provide our employees and patients an environment that allows for optimal health outcomes. Continuing and enhancing these efforts in the years to come will only improve our delivery of care and set us up for sustained success into the future.

One area of success in 2016 that will serve as a spring-board for these efforts is Inova's sustainability and wellness policy. This policy includes green building goals focused on all new construction and major renovations and LEED Silver certification. Smaller projects will also include specific LEED design elements according to the new policy. Inova was awarded the LEED silver designation for the Inova Women's Hospital Inova Children's Hospital (IWHICH) facility, and our North Patient Tower also qualified for LEED Silver. These projects will allow the Inova Fairfax Medical Campus (IFMC) to operate in a more environmentally beneficial manner which supports staff and patient outcomes as well as lower operating costs.

Another Inova campus that is making strides towards our green building goals is the Inova Center for Personalized Health (ICPH), located across the street from IFMC. This campus is being transformed into a wellness district in order to enhance the health and well-being of our patients at every stage of their life. The integration of LEED along with the WELL building standard at projects across the ICPH campus will only further enhance our mission by designing, constructing and operating these facilities to achieve optimal health. We are very excited about the opportunity to integrate these design disciplines at ICPH, along with key operational functions including nourishing and sustainable food options, green cleaning, pro-active waste management and tenant engagement in order to position our new health district for success.

Inova also continues to manage the impact of our operations and provide health and wellness coaching in order to improve our bottom line results. We understand that healthy and happy employees are at the core of what we do and we continue to move in a positive direction as it relates to trends in employee health. We also continue to increase our dollar savings in relation to key operational and purchasing functions that further exemplify the importance of a coordinated sustainability effort. Both of these areas also lead to further employee engagement that once again supports the necessity of these programs. We plan to put even more resources into employee engagement in 2017 because the payoff is significant.

I want to personally thank all of Inova's staff, contractors and volunteers for everything they do.I look forward to a very productive and exciting 2017.

Mark S. Stauder

Mark S. Stander

President and Chief Operating Officer

Inova

Healthy Planet, Healthy People: 2016 Successes

- 5585 individuals participated in free health screenings, which provided them with comprehensive lab results including total cholesterol, LDL and HDL, insulin and glucose levels and thyroid function.
- 320 sustainable, healthy meals were prepared in seasonal employee cooking classes.
- 5,436 employees participated in monthly fitness walks.
- 11,125 pounds of local, seasonal produce were delivered to Inova employees through our CSA partnership, resulting in nearly \$17,000 of direct support for local farmers.
- 44 tons of lifesaving medical supplies were diverted from landfills, and were instead donated to medical mission trips around the world.
- 1 million total pounds of waste were recycled system-wide.
- 13% reduction in system-wide energy usage from 2012 baseline year.





WellAware Program: Wellness at Inova

WellAware is a goal-based, healthy lifestyle, system-wide program designed to support ALL Inova employees and spouses at all health and fitness levels. In addition to supporting a culture of health and wellness for employees, Inova employees who participate in WellAware and carry our medical insurance are eligible to receive a discount on their medical premiums for the following year. The overarching theme is a sense of strong community and total wellness.

In 2016, WellAware focused on metabolic syndrome and its effect on Inova employees and spouses. Metabolic syndrome is a cluster of conditions increased blood pressure, high blood sugar, excess body fat around the waist, and abnormal cholesterol or triglyceride levels — that occur together, increasing your risk of heart disease, stroke and diabetes. During the 2016 WellAware Health Screening, these five labs and biometrics were taken. These results in our 2017 WellAware year; if you (the primary insurance holder) have three or more of these indicators on your 2016 WellAware Employee Health Screening results you will need to complete personalized health coaching, completing the Metabolic Profile qualifier, in order to receive a discount on your 2018 medical insurance premiums. With this year's new qualifier, we look to improve our employees' healthy behaviors and connect them with a primary care physician for a medical plan. We continue to grow our culture or wellness and healthy employees at Inova.

WellAware Mission

To support employees, their families and our community realize life balance and purpose by providing motivation, support and guidance in optimal wellness.



The WellAware program is focused on supporting whole health though our five dimensions of health.

What We Believe



Be Aware

Knowing and understanding information on your health profile is the important first step in managing your unique wellness needs.



Health Coaching

Health Coaching offers online support or support with a personal health coach who is as committed to your health goals as you are.



Get Active

Physical fitness can produce long-term health benefits and help prevent chronic diseases.



Eat Well

Good nutrition and healthy eating habits provide a foundation for being healthy and can help reduce the risk of chronic diseases.



Healthy Mind

Living life to the fullest is centered on having a healthy mind.

What We Do

Be Aware

- Biometric Health Screening for ALL Inova employees
- Health Screening (including bloodwork) for ALL Inova employees
- Online health assessment to ALL Inova employees
- Variety of health check-ins with our Health Coaches

Health Coaching

- Multiple online health coaching programs; Personal Back Coach, Personal Quit Coach, BabyNET, Personal Weight Coach, Food and Fit Coach, Aetna Journeys and Aetna Simple Steps
- In person one-on-one health coaching to help develop individual wellness goals, create a plan and help with each step along the way
- Dedicated health coaches to support developing a culture of wellness throughout Inova

Get Active

- · Ability to track participation in a variety of activities including walking, water activity, sports, skiing and everything in between
- On-site fitness walks
- On-site fitness classes
- On-going team-based challenges

Eat Well

- Enhancing healthy choice offerings in the cafeterias
- Making healthier choices more accessible in the cafeterias through design (including product placement)
- Reducing offerings of sugar sweetened beverages
- Highlighting existing healthy foods practices served at Inova cafeterias such as elimination of trans-fat foods
- Registered Dietitian on staff to answer any nutrition related questions and quide employees to other helpful resources

Healthy Mind

- Engaging in altruism through volunteer activities
- Developing a culture of wellness though the posting of helpful and healthy comments on the internal social media platform
- Offering classes and programing with a focus on stress reduction
- On-site fitness walks
- On-site fitness classes
- On-going team-based challenges

Success Stories

1. "I could not be happier for coaching client, Sandra Brown. Sandra has made vast improvements to both her nutrition and exercise in just the span of a month and is already down 11lbs in two sessions! She also has brought her passion and knowledge home to her husband and he too is seeing great results because of Sandra. They have been watching their carbohydrate consumption, eating more lean protein, veggies, and fruits, and both are getting more active TOGETHER. Her passion and drive towards her and her husband's health shines through at each coaching session and I have no doubt that her success will continue. Great job Sandra!"

- Coach Kara

2. "My coach, Carlo, assisted me with providing both motivation and resources to better track my nutritional and exercise goals and strategies to enhance my current programs."

-Joan Dannemann, IFMC

3. "I would recommend this program to any Inova employee looking for help meeting weight loss or other health related goals!"

-Trevor Scott, IFMC



Sustainability at Inova

Goals and Progress

Goal 1: Launch Inova's 2020 Energy campaign that is associated with our 2020 Energy plan.

Progress: The system-wide energy metering system became fully operational in 2016, allowing the energy team to focus on energy reduction through improved operational efficiency and plant infrastructure improvements. These activities allowed Inova to reduce energy use intensity (EUI) by just under 3% this past year, in line with the 20% reduction goal by 2020.

Goal 2: Develop and launch a new employee engagement strategy that is focused on key organizational influencers.

Progress: New Communications Plan developed and executed in 2016. Plan included list of key stakeholders along with specific actions targeting organizational influencers. Held meetings with those key groups including leadership, environmental services, food services, supply chain and targeted clinical leads. Meetings informed new rounding plan that will be executed in 2017.

Environmental Mission Statement

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

Goal 3: Develop a strategic plan for Inova's supply chain department focused on sustainability and stakeholder engagement.

Progress: Internal engagement plan developed and executed that included a focus on key suppliers and business partners. Key sustainability metrics were also introduced into new food services and print contracts; compression sleeves were added to the list of medical devices collected for reprocessing; and reprocessing efforts resulted in an approximate 20% increase in savings over 2016.

Inova Alexandria Hospital



Inova Fair Oaks Hospital



Inova Fairfax Medical Campus



Inova Loudoun Hospital



Inova Mount Vernon Hospital



Goal 4: Develop a climate actions strategy and do a comprehensive GHG inventory.

Progress: Climate related actions were memorialized in the 2016 and 2017 operational plans; and a preliminary GHG inventory was developed as part of an annual awards application. Other climate related activities that took place in 2016 included an Earth month webinar on Climate and Health; incorporation of climate language in 4 out of 5 hospital community health needs assessments; an update to Inova's external sustainability website; the development of a series of climate and health brochures for specific populations; and the screening of the Health Care Without Harm 'Do No Harm' video at internal and new employee meetings.

Goal 5: Re-evaluate and enhance the 1, 3 and 5 year strategic plan with quantifiable goals and timelines.

Progress: The 2016 operational plan was developed and executed and updated for 2017. The plan includes SMART goals for each operational area and a 3 or 5-year strategic plan is being investigated for 2017.

2017 Goals

- Goal 1 Implement climate marketing initiative that includes a focus on clinicians.
- Goal 2 Initiate 5-year strategic plan that coincides with Inova vision 2020.
- Goal 3 Identify and update key contracts to incorporate sustainability concepts and requirements.
- Goal 4 Continue to make progress on Inova's 2020 energy goals through a combination of projects, policies and standards.
- Goal 5 Continue employee engagement strategy grounded in a focus on key operational systems and electronic media outreach.



Environmental Focus Areas

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





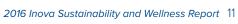














1. Waste Management

THE ISSUE

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

INOVA'S PROGRESS

- Diverted nearly 34,000 pounds of medical waste from area landfills through reprocessing medical devices—the weight equivalent of fourteen hippos.
- 16,300 pounds of electronics were collected for part collection and refurbishing.
- Recycled nearly 2.5 million pounds system-wide—enough to fill 152 dump trucks.
- Conducted in-service education at all facilities with a focus on RMW reduction.
- Achieved over \$67,000 in avoided landfill costs from recycling system-wide.

A system-level waste profile, comparing waste stream percentages to previous years and target ranges, is shown in the graph below.

Case Study: Giving Medical Supplies a Second Chance to Save Lives

For years, Inova has partnered with Brother's Brother Foundation (BBF), a nonprofit that collects medical supplies and sends them to healthcare workers doing medical mission trips around the world. Through this partnership, BBF collects reusable capital equipment that can be refurbished and used at facilities across the U.S. as well as every day hospital supplies that would normally be destined for the landfill. Items such as gauze, surgical gloves, tape and more are finding a second life in areas around the globe. In 2016 alone, Inova donated 98,870 pounds of medical supplies and equipment, which were used in 291 mission trips in 52 countries.

	2014 Total Lbs.	2014 %	2015 Total Lbs.	2015 %	2016 Total Lbs.	2016 %	Target %
Solid Waste	9,442,000	66.8%	10,843,100	71.1%	12,661,780	73.9%	60-65%
Recycling	2,581,980	18.3%	2,545,740	16.7%	2,430,060	14.2%	25-30%
RMW	2,022,320	14.3%	1,769,280	11.6%	1,895,320	11.1%	10%
Hazardous Waste	85.560	0.6%	96,640	0.6%	140,580	0.8%	0.5%



2. Energy Management

THE ISSUE

In the process of healing patients, hospitals and healthcare facilities consume significant amounts of energy. In fact, the healthcare sector is the second most energy-intensive in the United States. Inova employs a combination of energy reduction and energy efficiency strategies to reduce our system-wide energy footprint by 20% by year 2020, from a 2012 baseline.

INOVA'S PROGRESS

- Inova reduced system-wide energy consumption per square foot by 13% since 2012 baseline, making progress to achieve the ultimate goal of a 20% energy reduction by the year 2020.
- Steam Trap Audits and repairs were conducted at all five hospitals, yielding an estimated \$115,000 in savings system-wide. These audits also saved approximately 17.5 million kBtu's—an energy savings equivalent to powering 136 homes' electricity use for one year.
- Inova Mount Vernon implemented a boiler economizer, saving the facility 2.5 million kBtu's in 2016—the same as taking 28 passenger cars off the road for one year.
- Inova Alexandria's Central Plant Lighting upgrade project, in which 124 fluorescent lights were replaced with LED lamps, resulted in energy savings equivalent to 31,000 miles driven by an average passenger vehicle.
- During an expansion project, Inova Fair Oaks replaced standard efficiency cooling units with HE Chillers, saving 1.5 million kWh and claiming a nearly \$80,000 utility incentive rebate.
- Inova Loudoun upgraded parking lot lights to LED fixtures, saving enough electricity to power two homes' electricity use for one year

Case Study: Inova Fairfax Medical Campus Energy Efficiency

IFMC is made up of several buildings with independent heating hot water systems that serve varying spaces. In early summer 2016, it was discovered that some of the buildings had dedicated preheat systems that served only air handling units (AHUs). The operation of the preheat systems is only required in the winter as freeze/low temperature protection. It was decided that these systems should automatically be disabled based on outside air temperature by the building management system. Only accounting for pump energy, this project has saved over 107,000 kWh/year.



A Note About Climate Change

One of the key findings in the 2014 National Climate Assessment—the most comprehensive assessment to date of the impacts of climate change in the United States—was the following:

Public health actions, especially preparedness and prevention, can do much to protect people from some of the impacts of climate change. Early action provides the largest health benefits. As threats increase, our ability to adapt to future changes may be limited.

Prevention is a central tenant of public health. Many conditions that are difficult and costly to treat when a patient gets to the doctor could be prevented before they occur at a fraction of the cost. Similarly, many of the larger health impacts associated with climate change can be prevented through early action at a significantly lower cost than dealing with them after they occur.

Inova's sustainability program is increasingly focused on taking action to protect the health of our communities through education and advocacy efforts. To this end, in 2016, Inova worked to establish Virginia Clinicians for Climate Action (VCCA), a coalition of clinicians in Virginia focused on the important relationship our changing climate has on our health. We also added language into our Community Health Needs Assessments (CHNAs) identifying climate change as a community health priority. We also developed and produced a series of climate and health brochures to provide education to members in our communities.



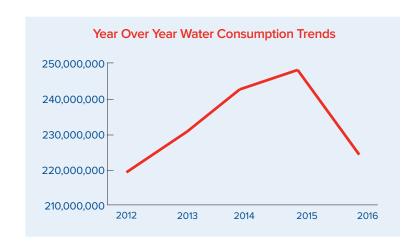
3. Water Management

THE ISSUE

Hospitals are generally some of the largest users of water within their communities. While the high consumption of water is a necessity for the provision of medical treatment and the maintenance of healthcare facilities, it also has its own environmental and health impacts that make water management an important consideration for Inova's sustainability goals.

INOVA'S PROGRESS

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. To this end, Inova's Facilities Management and Engineering Departments work together to implement water conservation practices and efficient equipment wherever possible. Inova also continues to track our water consumption through the EPA's Energy Star Portfolio Manager.



	2012	2013	2014	2015	2016
Inova Alexandria	36,495,000	32,600,000	33,500,000	27,362,000	31,500,000
Inova Fair Oaks	28,280,000	32,400,000	31,310,000	31,240,000	32,440,000
Inova Fairfax	118,636,000	125,000,000	133,100,000	140,034,000	113,973,000
Inova Loudoun	21,400,000	20,900,000	24,340,000	24,909,000	25,706,000
Inova Mount Vernon	14,630,000	19,600,000	20,200,000	24,114,000	23,778,000
Total	219,441,000	230,500,000	242,450,000	247,659,000	227,397,000



4. Environmentally-Preferable Purchasing

THE ISSUE

Hospital supply chain teams have an important opportunity to help shift the healthcare marketplace by using their organizations' purchasing power to demand safer, healthier, more environmentally preferable products from their supplier partners. Inova's approach to environmentally preferable purchasing includes making progress in two Practice Greenhealth initiatives: Greening the Supply Chain and Greening the OR.

INOVA'S PROGRESS

- Implemented a new contract to collect and buy back compression sleeve devices.
- Reworked the master print contract to default to double-sided and black and white printing, and reduce the use of desk-side printing devices.
- System-wide reprocessed medical device purchasing program for specific medical devices, resulting in over \$1 million in savings in 2016.
- Invested \$114,369 in green cleaning supplies system-wide.

Case Study: Expanding Non-Invasive Reprocessing Program

Inova continues work in environmentally preferable purchasing by regularly convening both vendors and supply chain staff that touch these areas. In 2016, meetings with the supply chain nursing lead resulted in a new contract to collect and buy back sequential compression device (SCD) sleeves. The program started in October 2016 at three out of five of our hospitals, and in the first month, we collected over 100 pounds of SCD sleeves. With employee education and further expansion to the other two hospitals, SCD reprocessing will expand the reach of our reprocessing program system-wide. Further, this development is expected to increase our cost savings and divert further medical waste from landfills. While most of our reprocessing product lines are invasive, expanding the program to include compression sleeve devices will increase Inova's non-invasive device reprocessing efforts.

2016 Percent Gre	en Spend on	Cleaning Products
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	Total \$ Green Cleaning Chemicals	Total \$ Conventional Cleaning Chemicals	Total \$ All Cleaning Products	% Green \$ of Total
Inova Alexandria	\$11,536	\$57,531	\$69,067	17%
Inova Fair Oaks	\$8,844	\$40,881	\$49,725	18%
Inova Fairfax	\$75,804	\$143,660	\$219,444	35%
Inova Loudoun	\$10,215	\$31,318	\$41,533	25%
Inova Mount Vernon	\$7,976	\$39,693	\$47,669	17%
Total	\$114,375	\$313,062	\$427,437	27%

Single-Use Device Reprocessing
Purchase Savings

	2014	2015	2016
Total	\$464,455	\$833,883	\$958,215

Waste Diversion
from Reprocessing (lbs.)

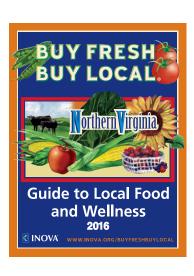
	2014	2015	2016
Total	24,223	26,618	33,806



5. Sustainable Foods

THE ISSUE

Inova is committed to procuring and serving healthier foods to improve the health and wellness of both the planet and the consumer. In 2016, we experienced a transition year where Inova adopted more rigorous standards around food procurement—particularly regarding antibiotic-free meat and poultry. Inova will be working diligently in 2017 to implement these new requirements.



INOVA'S PROGRESS

	2016 Local Food Purch	nases
Local Spend	Total Distributor Reported Spend	Pounds of Local Food Purchased
\$21,786.27	\$1,043,981.79	20,257

	Total Program	Total Non-Program	Total Spend %
Cage Free Shell Eggs (HFAC)	\$75,755.24	\$3,887.50	95%
Coffee	\$104,414.32	\$51,473.36	67%
rBGH Milk	\$241,821.14	\$0	100%
rBGH Yogurt	\$138,870.20	\$0	100%
Antibiotic-Free Chicken	\$0	\$844,485.00	0%
Antibiotic-Free Turkey	\$0	\$377,157.00	0%
Sustainable Seafood	\$235,592.24	\$8,931.70	96%
Certified Humane/Antibiotic-Free Beef	\$0	\$476,048.00	0%
Certified Humane/Antibiotic-Free Pork	\$32.00	\$233,553.00	0%
Total	\$796,485.14	\$1,995,535.56	29%

Case Study: Engaging Employees In Healthier Foods

Inova is committed to improving the health and well-being of its employees, and this starts with offering nutritious, sustainable foods. In addition to continuing our progress toward sustainable and local purchases in our cafeterias, Inova continues to offer a CSA to its employees. In 2016, this CSA partnership resulted in 1,270 deliveries to Inova employees, totaling over 11,000 pounds of locally-sourced food. Additionally, Inova hosts a series of Farmers Markets at all hospitals every pay day Friday during growing season (Memorial Day through Labor Day), in order to sell healthy, seasonal produce to staff. Inova also hosted a series of seasonal "Eat Well Cooking Classes" in the summer and fall, where employees and their families worked with our Morrison chefs to prepare family-sized meals using seasonal ingredients.

2016 Hea	ealthy Beverages Spending Compared to Total			
-	Healthy Bev \$	Total Bev \$	Percent Healthy	
Inova Alexandria	\$86,534	\$220,300	39.3%	
Inova Fair Oaks	\$95,666	\$202,579	47.2%	
Inova Fairfax	\$478,849	\$929,135	51.5%	
Inova Loudoun	\$61,229	\$176,958	34.6%	
Inova Mount Vernon	\$55,767	\$101,573	54.9%	
Total	\$778,045	\$1,630,546	48%	





6. Alternative Transportation

THE ISSUE

Reducing miles on the road, from managing fleet activities to encouraging alternative transportation for our employees, reduces Inova's carbon footprint and positively contributes to better air quality and climate mitigation in our communities.

INOVA'S PROGRESS

Inova's alternative transportation program is a joint effort between our Safety & Security Department, Office of Sustainability, Facilities Management Department and the Fairfax County Department of Transportation. Our strategy aims to minimize the impacts of our employees' commutes by providing and incentivizing viable alternative commute options. Our efforts have been recognized by Fairfax County's Department of Transportation, as Inova Alexandria Hospital and Inova Fairfax Medical Campus have been designated among the county's "Best Workplaces for Commuters". Progress made in Alternative Transportation incentives and opportunities at Inova include:

- No-idling policy built into all system-wide transportation contract.
- Encouraging alternative transportation and wellness for our employees by incentivizing walking with WellAware points (associated with discount on insurance premiums).
- Bike racks for 293 bikes provided in 13 locations on Inova Fairfax Medical Campus, as well as access to lockers and showers for all employees.
- Hosting Bike to Work day events at all five hospitals.





7. Green Building

THE ISSUE

The manner in which a building is constructed, operated and maintained can have a significant impact on both the environment and people that interact within that space. Inova understands that healthy buildings result in healthier occupants, and we are committed to greening our buildings for patients, visitors, and staff.

INOVA'S PROGRESS

- Inova Women's and Children's hospital received LEED Silver designation in 2016.
- Fairfax Medical Campus North Tower project submitted all related requirements for LEED Certification and is currently awaiting the final decision.
- LEED/WELL elements incorporated into design and construction of multiple smaller projects that may not achieve full certification.
- LEED certification registrations submitted for multiple projects at Inova Center for Personalized Health campus.
- LEED/WELL certifications are now spelled out in Inova's sustainability policy as well as a draft building standard that will be finalized in 2017.

Case Study: Inova Women's Hospital And Inova Children's Hospital Achieve Leed Silver

Inova Fairfax Medical Campus' Inova Women's Hospital and Inova Children's Hospital (IWHICH) was awarded LEED Silver in 2016. The certified facility includes optimal air quality, natural light and low- or no-toxicity building materials. Part of a 665,000-square-foot campus expansion, the Women's and Children's hospitals are the largest phase of Inova's capital improvement program and elected to pursue LEED as part of a commitment to sustainability and its alignment with patient health. Energy and water conservation measures were of particular emphasis in the design and construction of the hospitals. These measures include a highly-efficient energy system including a central plant hot water and steam system, efficient HVAC, LED lighting, insulation and a white roof. Automated windows were also installed to reduce the need for air conditioning and to provide fresh air to the occupants. The facility addresses water consumption with low-flow plumbing, water cisterns, a rain garden and native plants featured in the landscaping.



2016
Inova Sustainability and Wellness Report



