Sustainability and Emory Healthcare: Goals and Accomplishment, part 2 – Rationales Prepared by the Emory Office of Sustainability Initiatives February, 2018

A. Food:

- The United States spends more than \$1 trillion dollars each year on the management of chronic disease.¹ At a time when more than 68% of the US population is considered obese or overweight² and diabetes affects more than 26 million Americans and is the seventh leading cause of death,³ hospitals have the opportunity to model safe, responsible, and nutritious eating behaviors.
- Buying sustainably grown food means Emory uses its purchasing power to support reduced use of toxic chemicals, enhanced soil quality, preservation of biodiversity, safer working conditions, and better economic rewards for both workers and farm owners.
- Antibiotic resistance from concentrated animal feeding operations has been identified by the National
 Academies and the Institute of Medicine as a major public health threat, and Emory's purchasing
 guidelines for meat products restrict the routine use of antibiotics. Our preference for grassfed meats
 supports operations that turn away from energy-intensive grain production, farmland erosion, and water
 contamination.
- Local food means shorter transport distances, reduced fossil fuel use, and a lower carbon footprint.
- Food procurement from local family farms supports a vibrant rural economy and restores the agricultural diversity of Georgia. A mix of small, medium and large farms increases civic vitality and reverses rural depopulation.

B. Climate, Energy, and Water:

- Energy conservation means a more livable city. By burning less fossil fuel to serve Emory hospitals, Atlanta will benefit from lower levels of asthma-causing particulates, neurologically-harmful mercury, and smog-producing gases.
- Energy conservation can be a significant money-saver, as shown by EUHM.
- The largest source of greenhouse gas pollution in the United States are coal-fired power plants, with the largest emitting plant located in Georgia.
- Adverse public health impacts from global warming include heat-related illness, increased respiratory
 and cardiovascular disease, injuries and premature deaths related to extreme weather events, changes
 in the prevalence and geographical distribution of food- and water-borne illnesses and other infectious
 diseases, and threats to mental health.⁴
- By 2030, the United Nations projects that global water demand will exceed supply by 40 percent. Metro
 Atlanta is the largest municipal region reliant on the smallest single watershed for its drinking water in
 the U.S., and Atlanta's growing water needs require conservation to create an equitable and sustainable
 future for downstream communities.
- Use of potable water requires significant use of energy and infrastructure for treatment and transport, with roughly 75% of all industrial water withdrawals used for energy production.⁵

¹ Practice Greenhealth. Healthier Food. https://practicegreenhealth.org/topics/healthier-food#_edn1

² Centers for Disease Control and Prevention National Center for Health Statistics. FastStats: Obesity and Overweight. www.cdc.gov/nchs/fastats/overwt.htm

³ Centers for Disease Control and Prevention. Get the Facts on Diabetes. http://www.cdc.gov/Features/DiabetesFactSheet/

⁴ Centers for Disease Control and Prevention National Center for Environmental Health. Climate Effects on Health. https://www.cdc.gov/climateandhealth/effects/default.htm

⁵ The United Nations World Water Development Report 2014: Water and Energy. Paris, UNESCO.

C. Building Design/Healthy Healing Spaces:

- Emory has an opportunity to be one of the nation's leading healthcare systems with renovated and
 retrofitted buildings, providing healthier and more productive working conditions for employees and
 improving patient satisfaction.
- Scientific literature draws correlations between environmental attributes such as daylighting, access to outdoor space, and indoor air quality to clinical metrics such as reduced medication errors, shorter length of stay, and reducing patient and family stress.⁶

D. Waste:

- The health care sector generates a staggering 29 pounds of waste per staffed bed in just one day.
- Medical waste disposal has health impacts from mercury released from medical waste incinerators and pharmaceutical waste found in drinking water.
- Metro Atlanta's landfills have environmental toxicity, social justice, and climate change implications; therefore investments in recycling, composting, and reducing and reusing materials enhance stewardship of Emory's surrounding communities.
- These environmental and social harms disproportionately affect areas of low income and racial and ethnic minorities, where landfills and medical waste incinerators are located.

E. Purchasing:

- The U.S. health care industry spends more than \$200 billion annually on medical and non-medical products. Some products used in health care may contain or release carcinogens, reproductive toxins, or other hazardous materials. These health harms and the growing number of disposable products, packaging waste, and products that are energy or water-intensive or require special handling or hazardous waste disposal at the end of life can be reduced with environmentally preferable purchasing.
- Promoting a healthy, thriving, and resilient community is central to Emory's sustainability mission, and purchasing offers an opportunity to enhance sustainability decision making in the national and Emory supply chains.

F. Culture and Behavior Change:

- Emory's sustainability leadership in energy conservation, forest preservation, water reclamation in the WaterHub, sustainable food and waste reduction all enhance employee loyalty and improve recruitment and retention.
- The teamwork and leadership generated by many sustainability projects build capacity and esprit-decorps and pays dividends all through the enterprise.

G. Community Benefit:

- Emory Healthcare is a leader in local and global community benefit beyond charity care. Emory's
 sustainability goals provide an opportunity to enhance community benefit and meet President Sterk's
 goals of strong local partnerships.
- Because many sustainability challenges disproportionately affect lower-income neighborhoods, Emory's progress in sustainability supports our efforts to be a good neighbor.

⁶ Practice Greenhealth, Green Design and Construction, https://practicegreenhealth.org/topics/green-design-construction

⁷ Practice Greenhealth. Less Waste. https://practicegreenhealth.org/topics/less-waste

⁸ http://www.healthtrustcorp.com/Content/BecomeAMember/WhyChooseHT.htm

⁹ The Health Case for Reforming the Toxic Substances Control Act, Safer Chemicals, Healthy Families Report, Jan 2010, pg 3.