We Mean Green Eggs and Ham

Commitment To Sustainability
University of North Texas
Regional Business Conference 2018
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Would You Like our Mission Plan?

UNT’s ultimate mission is to give a green light to greatness by helping its students, region, state and nation excel.

The UNT community takes great pride in the sustainability efforts of our campus and the surrounding Denton Community. Students, staff, and faculty are more than eager to jump in to new programs available, volunteer efforts, or the spreading of the word about our initiatives. When we chant “We Mean Green” we truly Mean Green.

SUSTAINABILITY MISSION

The mission of the Office of Sustainability is to collaborate with the UNT family to generate cohesion, provide information and support, and encourage behavior changes, in order to increase awareness of environmental, economic and social challenges.
To learn our History if you can?

The sustainability initiative has been in place on the UNT campus since the university was first founded in 1890. Our school colors, green and white, were chosen in 1902 as a sign of appreciation of our Earth and mother nature. As early as 1935, under J.K.G. “Doc” Silvey who researched fresh water conditions at the university, solid environmental projects were being implemented on our campus which positioned our school as a leader in environmental science. Since then, UNT has developed dozens of programs in an effort to be more sustainable and environmentally friendly. In 2008, UNT became the first large Texas University to sign the American College and University President’s Climate Commitment (ACUPCC). The University Office of Sustainability was created in February 2009. In a very short time, the office has completed five of the seven tangible actions set by the ACUPCC, propelling UNT to a position as the top university in Texas, and the top 17% in the nation. The UNT Office of Sustainability has two charges: nationally recognized sustainability and movement towards carbon neutrality.
To See Our Bond with Sustainability?

Awards and certifications

- UNT named a Green College by The Princeton Review
- First LEED Platinum Stadium in the Nation
- First Energy Star certified building in Texas
- UNT Certified as Bee Campus USA
  - UNT’s commitment to provide habitat for pollinators and education about their importance to healthy ecosystems has earned UNT the honor of being named the first Bee Campus USA in Texas and the 12th in the nation.

Degrees

- World’s first graduate program in environmental philosophy and world’s first field station in environmental philosophy, science and policy at Cape Horn, Chile
  - Environmental philosophy program recognized as the best in the world by the International Association for Environmental Philosophy
- First master’s program in international sustainable tourism in the U.S.
Sustainability efforts were first developed by the UNT faculty in the early 1900’s, but later students were able to join into the conversation to voice their opinions about the direction of sustainability on our campus. Today, UNT has multiple organizations and committees dedicated to spearheading sustainability efforts on our campus and creating new and innovative ways to keep our community involved. One example of this is the We Mean Green Fund Committee, in which students and faculty are able to come together to implement new initiatives on campus as well as create new sustainable programming efforts.

“My favorite thing about UNT is how sustainable we are! The environment is really important to me so it was an easy choice for me to come to UNT. I know that as a community we are trying hard to be environmentally conscious and sustainable in a variety of ways and it makes me proud to be an Eagle!” - Kirsten McGee, RHA Director of Involvement

One of the many UNT Community Gardens funded by the We Mean Green Fund
One of UNT’s Four Bold Goals is to continue as a world leader in sustainability efforts. This single goal is the driving force behind most of the efforts put forth on our campus surrounding sustainability. From this broad goal, UNT was able to establish smaller, more specific goals for our campus within the last 5 years.

Overall, the goals are realistic and attainable through the efforts being put forth by our UNT Community. UNT’s smaller sustainability goals may change from year to year depending on the progress made, but the main goal has always been the same. UNT would like to be continue being that world leader in sustainability efforts.

Goals

To be carbon neutral by 2040
- Actions to reach this goal are supervised by both the Sustainability Council and the Office of Sustainability. Every year the Office does a greenhouse gas inventory to identify areas where the university can reduce emissions.

Having at least 1 eco-rep at each residence hall
- Eco-Reps are able to have weekly discussions at staff meeting in each of the residence halls to create more awareness to sustainability

RHA and RAs to implement more meaningful sustainability efforts in their programming with the help of the North Texas Eco-Reps and the Office of Sustainability.

North Texas Eco-Reps
To Learn of Programs and their Roles

The We Mean Green Fund provides the opportunity for members of the UNT community to make our campus even greener! Every student pays a $5 Environmental Service fee during the Spring and Fall semester that is dedicated to reduce UNT's impact on the environment.

The WMGF Has 2 Co-Equal Goals

• Have the greatest possible impact to increase the environmental sustainability of the UNT campus
• Have the greatest possible impact for students at UNT by providing educational opportunities related to environmental sustainability.

The We Mean Green Fund (WMGF) Committee is a student-majority committee comprised of 10 students and 3 faculty or staff members. The Committee has the large responsibility of evaluating proposals for sustainability projects that are received from the UNT community, and recommending funding of approved projects from the We Mean Green Fund.

“We Mean Green Fund has provided a really solid opportunity for students to suggest and see real change on campus with regards to sustainability! I think it’s amazing that if I had a sustainable program idea, I know I could bring it to them and that I could see it implemented! They make change happen in real time.” - Maggie Myers, RHA Director of Development
**Community Garden** - The UNT Community Garden will be a Space where UNT students, faculty, and staff can organically grow food, become educated on sustainability, and foster connections and relationships that will benefit our community. The UNT Community Garden is meant to be a place for all students, regardless of gardening knowledge or background. Seeds, tools, water, and gardening supplies will be provided for FREE for gardeners. The garden is intended to be a place for all to gather, garden, learn, and socialize. The Garden came about through a student led proposal presented to the We Mean Green Fund Committee in 2015. It will be located in front of Legends Hall, behind the Rec Center, and will feature raised garden beds, composting, native landscaping for pollinators, and fruit trees!

**Pollinative Prairie** - In support of UNT’s Bee Campus USA designation, a group of UNT staff and students have received funding and access to 4.5 acres of space for the Pollinative Prairie, prairie restoration project. The prairie will serve as a pollinator habitat and feature native grasses, wildflowers, and habitat spaces to protect, preserve, and promote native pollinator populations.

**BYOB (Bring Your Own Bottle)** - This is an ongoing initiative from the Office of Sustainability, and in 2016 the We Mean Green Fund funded the purchase of 3,000 reusable bottles that were distributed at EarthFest. The bottles help UNT Students keep single-use plastic bottles out of the landfill and keep the oil used to produce these bottles in the ground.

**Solar Trailer** - UNT provides a number of educational and social events on campus every year. Many of these events require electricity, and traditionally this has meant the use of a loud, gasoline powered generator. Now, UNT We Mean Green fund has purchased a solar powered generator that will provide clean, sustainable, and quiet energy for UNT events!
To Learn of Programs and their Roles

**Storm Drain Art** - In an effort to bring awareness to litter and other pollutants, and its impact on our water resources, UNT We Mean Green Fund has started a competition to create a work of art on our sidewalks that brings attention to our storm drains. UNT Students can submit designs and win a $250 cash prize if their design is chosen for installation at one of the 3 designated locations.

**Tailgate Recycling** - a UNT student led a proposal to create a recycling competition at football tailgates to bring awareness to the importance of recycling and inspire some friendly competition. The competition collected over 230 pounds of recyclables.

**Sustainable shirts** - In an effort to bring awareness to litter and other pollutants, and its impact on our water resources, UNT We Mean Green Fund has started a competition to create a work of art on our sidewalks that brings attention to our storm drains. UNT Students can submit designs and win a $250 cash prize if their design is chosen for installation at one of the 3 designated locations.

**I Bike UNT** - With a student idea and a partnership with UNT Police, this We Mean Green Fund proposal aims to prevent theft from occurring at UNT and also provide a tool for recovering bicycles if theft occurs. The initiative launched at EarthFest 2016 when UNT PD engraved over 100 bicycles and those students received an OnGuard Bulldog U-Lock. Promotes biking on campus and around Denton.

**Sustainability Hackathon** - In 2016 UNT Sustainability hosted its first annual Sustainability Hackathon which brought together students from all backgrounds to solve problems related to campus sustainability. 8 proposals were generated with 1 already being implemented. Winners of the hackathon received $500, $400, and $300 gift cards for first, second, and third place respectively. This has continued each year since to continue raising awareness for sustainability efforts.
To Learn of Programs and their Roles

UNT Goes GreenSense
UNT will have 100% renewable electricity through enrollment in Denton Municipal Electric’s GreenSense Renewable Electricity Program. UNT’s enrollment will purchase Renewable Energy Certificates to ensure that energy from green sources is delivered to the grid to cover the electricity use at UNT’s main campus and Discovery Park campus. This We Mean Green Fund project was mentored by Dr. Adam Briggle and had a team of contributors including students. This purchase represents the desire of countless students that UNT commit to renewable energy.

The University of North Texas has enrolled in the US EPA’s Green Power Partnership, a leaderboard of institutions committed to renewable energy purchasing. UNT ranks #1 of universities in Texas, #11 of universities nationally, and #72 of all public or private institutions!

UNT’s GreenSense enrollment prevents carbon emissions equivalent to:
- 7,919 average residential homes
- 15,841 passenger vehicles driven for one year
- 180,221,389 miles driven by an average passenger vehicle. (Enough to drive from New York to Los Angeles 64,945 times or around the world 7,238 times.)
- 173,627 barrels of oil
- 3,074,033 tanks of propane
- 23,800 tons of waste recycled instead of landfilled
- Switching 2,658,417 incandescent lightbulbs to LED
- How many trees would it take to sequester this much carbon?
- Nearly 2,000,000 tree seedlings grown for 10 years.
- 71,182 acres of US forest, more than 1/10 the land area of Rhode Island.
TAMS Green IN Grid OUT - This proposal purchased equipment so that students could hook their bike up to a stand and a generator and generate electricity for their phones and laptops. TAMS then conducted surveys of those students that participated to determine the effect that generating electricity had on their perceptions about energy use and conservation.

Perhaps I’ll Stop in a Residence Hall

Some of the green initiatives of Housing and Residence Life include the following:

- Replacement of all shower heads with low flow, air injected shower heads. Saving nearly three million gallons of water and $20,000 per year.
- Replacement of most faucet aerators with low flow models. Saving 1.6 million gallons of water and $11,000 per year.
- Replacement of all top loading washing machines with frontloading models. Saving more than two million gallons of water and $15,000 per year.
- Replacement of five water-cooled ice machines. Saving 520,000 gallons of water and $3,120 per year.
- Replacement of single pane windows with thermally efficient, Low E, dual-pane windows in all but one building.
- Conversion from steam-building boilers to domestic hot water boilers for the provision of domestic hot water. This allows the steam boilers to be brought down during warm weather months.
- Conversion from steam to hot water in the HVAC systems. This is more thermally efficient, as well as variable in temperature during mild weather we can run at a lower water temperature.
- Change to the use of low-emission carpet, paint and wall coverings.
- Installation of a third generation control system for the HVAC systems.
- Replacement of the majority of our fleet of large trucks with smaller vehicles, including some electric. This has reduced our fuel bill by approximately 42%.
Dining Services actively engages procedures, policies, and practices that foster a sustainable food system at the University of North Texas.

- Great tasting made-from-scratch food is served in all of our dining halls. By serving food that taste great guests eat more and waste less. Making food from scratch not only improves the quality and taste of the food but it reduces much of the waste associated with using canned and packaged convenience ingredients. The result has been a decrease in year-over-year purchasing by 11% allowing us to improve the quality of each meal and decrease waste at the same time.

- Sustainability partnerships and education makes us more effective in our sustainability efforts. This year Dining Services was selected as the sustainability department of the year. By partnering with sustainability groups on campus we create new ways to save resources by educating our guests on ways they can help reduce, reuse and recycle.

- Purchasing from local sources is our preferred method for everything we use in our dining halls. By purchasing local we save money and reduce our carbon footprint. When we can’t find something from a local vendor we look for items made in Texas or the southwest region.

- Reusable Cutlery Glassware & China is provided in all of our resident dining halls, Avesta restaurant and Verde catering. This effort decreases the amount of single use disposable waste going into the local landfills.

- Compostable Packaging and Cutlery: In 2009 UNT dining services partnered with Innoware packaging and replaced the “to-go” cutlery and packaging with a compostable substitute. The Eco- Expressions container meets the ASTM standards for compost ability as certified by the Biodegradable Products Institute. That means it biodegrades in a commercial compost facility completely within 60-180 days, without releasing any toxic residues. The containers are made from an annual renewable resource that is not tied to corn for main feedstock, it reduces environmental impact and the production process, uses fewer fossil fuels and emits less carbon dioxide.

- Recycling: UNT dining services recycles all cardboard and waste paper in all retail and resident dining locations. In addition we have recycle bins located near all of our dining facilities that encourage guests to recycle; glass, plastic and aluminum containers.
Maybe Dining, but I will not Stall

• Fair Trade Certified and organic coffee is used at our Green Mountain coffee locations (Union and Discovery Park). We offer gourmet fair trade and certified organic coffees in a wide range of origins and roast levels. Green Mountain is also available at the Wooten Hall ‘Go Café’ as well as our Dining Halls. Their organic beans and processes meet the strict certification standards of both the USDA and OCIA. Their Fair Trade coffees are certified by TransFair, an organization dedicated to offering better trading conditions for producers and workers in developing countries.

• Electronic record keeping in our offices has allowed us to cut down on the amount of paper we use and saves on printer ink usage.

• Recycle Mug refill program: This initiative offers customers a discount when they use their own mug at any of our retail locations on campus. By using fewer paper cups we can lower costs to the customer and decrease waste going to our landfills.

• “Green” Chemical Line: Dining Services uses a ‘green’ chemical program that is safe, sustainable and earth friendly. The chemicals we use are concentrated solid formulations that utilize innovative packaging and dispensing methods which; use less water and energy, reduces harsh chemicals and waste that is released into the environment and reduces transportation costs associated with bulky chemicals.

• Trayless Dining Halls and Retail locations: Dining Services has eliminated the use of trays in 3 of our dining halls and all of our retail locations. By removing trays, we decrease food waste, conserve water and energy and reduce the use of cleaning chemicals. Removing trays reduces food waste by 25-30% per person and conserves almost 1900 liters of water annually

• Water Conservation: To preserve water usage all dishwashing machine outlets have a special nozzle that regulates water usage with monthly monitoring of our dishwashing cycles to maximize the efficiency of our dishwashing activity and decrease water usage. Additionally, the ice machines used in the Dining Halls are air-cooled instead of water-cooled. Most water-cooled ice machines use a once-through cooling system, where the water used to cool the machine is subsequently dumped down the drain. The switch to air-cooled machines saves about 12 million gallons of water every year.

• Recycled Napkins: All of our retail and residential Dining Halls use recycled paper napkins made from chemical free post-consumer recycled paper.

“It is truly inspiring to see how much of the food served is grown on campus and locally, as well as how innovative way to grow food. Through these efforts, you can tell our university truly cares about its students.” - Jordan Hall, RHA Advisor
I’ll only follow if you’re S.M.A.R.T.

Save | Measure | Achieve | Reduce | Track

The university has partnered with Schneider Electric to further improve many of the university’s current energy and water systems. UNT previously worked with Schneider on a 10-year energy savings project that began in 1997, and has allowed the university to save $1.2 million a year in energy costs. The new project will increase that savings to an estimated $3.2 million a year, and guarantee at least $42 million in savings over the next 20 years.

Ninety-three university buildings also will be renovated to include lighting controlled through motion sensors, installation of water conserving fixtures, electrical power upgrades and various HVAC upgrades. Once completed, the project will provide energy savings equivalent to removing 206,939 tons of carbon dioxide from the atmosphere, which is comparable to removing 41,387 cars from the roads or planting 56,287 acres of trees.

As part of the new energy savings project, UNT and Schneider Electric will partner in the creation of a campus energy tracking effort, which will be accomplished through extensive sub-metering of buildings on campus.

“Being able to see programming on campus that educates students on how to live sustainably is really cool! I know that after graduation, I’ll be able to take the things I learned from these programs and continue living a sustainable and environmentally friendly life.” - Dakota Musick, Freshman Resident
Take the LEED and We will start

LEED Certified Buildings:

- Business Leadership Building – GOLD
- Life Science Complex – GOLD
- UNT Union - GOLD
- Environmental Science Building - GOLD

Apogee Stadium

First newly constructed collegiate football stadium to reach *platinum certification in the United States*

The wind turbines are connected to the grid system for the entire eagle point campus, and will produce the equivalent of 30% of the energy required to run the stadium yearly. It is estimated the three wind turbines will provide approximately 500,000 kilowatt hours per year for the UNT Eagle Point power grid, effectively eliminating the emission of 323 metric tons of carbon dioxide annually into the atmosphere.

The high-performance stadium design uses energy-efficient heating, ventilation, air conditioning and lighting equipment, reducing energy consumption by 25 percent.

More than 12.5% of the energy that the building uses will be comes from renewable resources.

Of the products and materials used in the construction of the stadium,

20 percent were made with recycled content and

Including the turf made from recycled tires

More than 47 percent were manufactured locally.

The stadium’s contractor was able to recycle 83.34 percent of the construction waste material, which is higher than what was originally planned for!
Thanks for your Patience, Here’s the Citations

Dr Suess characters

Sustainability initiatives
http://studentaffairs.unt.edu/sustainable

History of Sustainability, We mean green fund information, UNT sustainability photos
-https://www.youtube.com/watch?v=V2N_yn7w4Gg

north Texas eco-rep information and photos
http://studentaffairs.unt.edu/sustainable/become-an-eco-rep

Images of UNT building courtesy of unt.edu