



**University of the Incarnate Word  
Annual Sustainability Report  
July 1, 2023 – June 30, 2024**

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This report intends to inform the UIW community and all relevant stakeholders of the University's sustainability impact from July 1st, 2023 to June 30th, 2024.



## **The University of the Incarnate Word Sustainability Commitment**

Sustainability balances human development and growth with the welfare of the natural world, both in the present and for the future. The emphasis placed on social justice by the Sisters of Charity of the Incarnate Word and the establishment of care for creation as a tenet of Catholic social teaching inspire us to make sustainability a part of our university's legacy. We commit to meeting people's cultural, educational, economic, and ecological needs in ways that protect and restore the natural environment.

–Adopted by the Sustainability Advisory Board on April 1, 2015

## FOREWORD

The University of the Incarnate Word continues to demonstrate a deep commitment to sustainability, innovation, research, and student engagement. This report from the 2023–2024 academic year captures the achievements and ongoing efforts that reflect the campus’s mission to care for both people and the planet.

A major milestone was the awarding of a \$1.2 million grant through the Hispanic-Serving Institutions Education Grants Program to support student success in Sustainability Studies. Led by Dr. John Hooker and Dr. Benjamin Miele, the initiative focuses on increasing representation of underserved students in the fields of environmental science and sustainability studies.

Throughout the year, students engaged in impactful, hands-on experiences regarding sustainability initiatives—from framing homes with Habitat for Humanity to winning national recognition in the “Campus Race to Zero Waste” competition. Thanks to the efforts of UIW Sustain and student volunteers, during the Green Game on February 29, 2024, UIW earned the “Per Capita Recycling” Award. Composting in the Student Engagement Center Dining Hall also diverted over 13,000 pounds of waste from landfills in one semester.

In April, the tenth annual Earth Fair brought together students, faculty, and community partners to celebrate Earth Day through education, performance, and advocacy. Highlights to note include the moving performance by Sr. Martha Ann Kirk, CCVI; UIW alumni, Isaac “Papa Bear” Cardenas of the Tap Pilam Nation; and Jesse Borrego, UIW alumnus and award-winning Mexican-American actor, titled “Land Taken, Land Given” that explored the stories of their contrasting ancestors, the Apache people and European settlers. Also, Dr. Pride Abongwa delivered the second annual sustainability studies lecture on the future of renewable energy.

UIW’s focus on innovative practices should also be mentioned. UIW’s Startup Challenge in 2023 was built around the theme “Impact, Innovation, and Sustainability” and spotlighted student-led sustainability ventures, including a winning model for an automated irrigation system by students from UIW Campus Bajío.

UIW advanced various sustainable infrastructure efforts, as well. Notably, UIW was one of five institutions worldwide to receive the EBSCO Industries Solar Grant, enabling solar-panel installation at the School of Osteopathic Medicine’s library to reduce emissions and energy use.

This year’s William Mulcahy Award for Ecological Stewardship honored Sr. Martha Ann Kirk, CCVI, whose tireless leadership has shaped UIW’s sustainability journey for over three decades.

Together, these efforts show that sustainability at UIW is not just a goal: it’s a collective commitment by faculty, staff, and students to gain a more just, equitable, and resilient future.

— Tara Hembrough. Ph. D.  
Associate Professor of English

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## Academics

### Establishment of New Endowed scholarship for Sustainability studies

The Good Earth Endowed Scholarship was created in memory of Ada Koenig Kirk and Bert Ambers Kirk, Jr.: Recognizing that our ancestors were gifted with land and that they cherished the beauty of creation, we wish to promote studies for clean water, food, air, and earth. We wish to promote compassion for all living creatures and the earth itself. We invite students who will open their eyes, hearts, and minds to beauty and to truth, keeping in mind the Sustainable Development Goals.

### UIW awarded \$1.2 million grant to support student success in Sustainability Studies.

The HSI program promotes and strengthens the ability of HSIs to carry out higher education programs to attract, retain, and graduate outstanding students capable of enhancing the nation's food, agriculture, natural resources, and human sciences professional and scientific work force. This grant program aligns the efforts of HSIs to support academic development and career attainment of underrepresented groups.

UIW was awarded \$1.2 million grant to support student success in Sustainability Studies. The UIW professors involved in this grant are Dr. John Hooker in Environmental Science and Dr. Miele, director of Sustainability Studies.



## Sustainability & Service Learning

### Spring 2024 Habitat for Humanity Volunteer Day.



Dr. Ruvuna's students of the UIW's Interior Design Program volunteered at a Habitat for Humanity construction day. Coordinated by Habitat for Humanity's own,



Mr. Fred Wall on a yearly basis. Both the Construction and Details Service Learning class and interior design students got involved volunteering at Habitat for Humanity. The students had a great learning experience as they got hands-on framing experience and a good understanding of how a house is built and assembled. The day started with just the foundation slab, and gradually, the students assembled and put together all the walls until all the framing was completed. Everyone put in a great effort and did an excellent job.





## Recycling Efforts

### UIW Repeats in National Wildlife Federation's 2024 Campus Race to Zero Waste Competition

The annual Green Game took place during the UIW Women's Basketball game on February 29, 2024. Known as *Campus Race to Zero Waste*, this competition is the nation's premier waste reduction competition among colleges and universities across the United States. The competition is managed by the National Wildlife Federation and governed by RecycleMania, Inc. UIW won the "Per Capita Recycling" award in the Gameday Basketball Category, a repeat of their award in 2022.

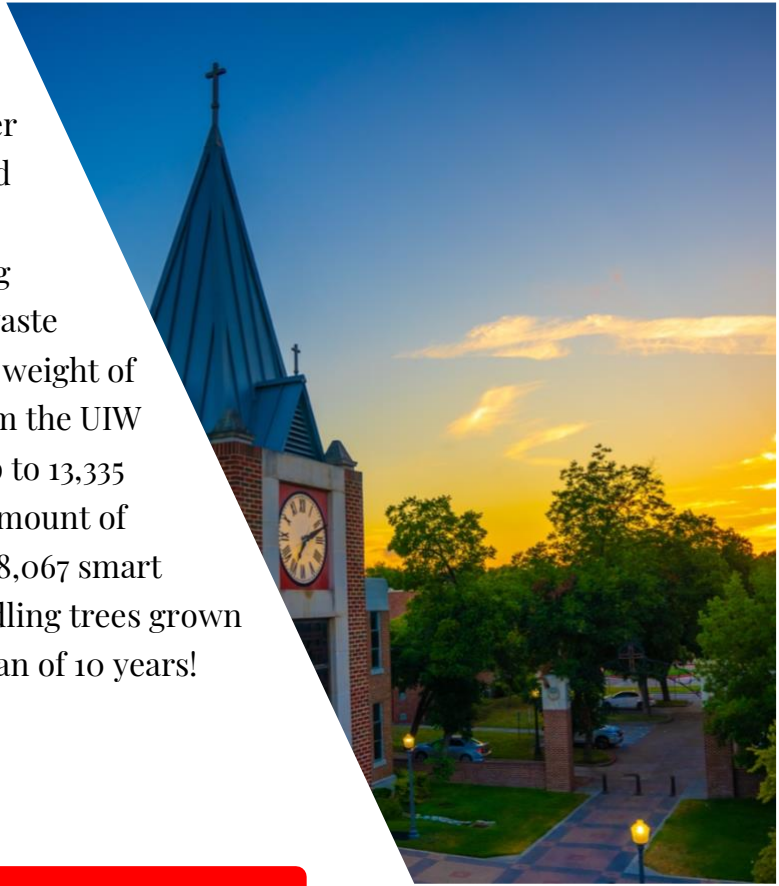
*"In 2024, a total of 2.7 million students, faculty and staff across more than 150 college campuses donated, composted and recycled more than 30 million pounds of waste. NWF"*



Dr. Benjamin Miele, associate professor of English and Chair of the UIW Sustainability Advisory Board, credits pre-game publicity by the UIW Sustain student group and efforts leading up to the game with the success of the event. He also says the award could not have been achieved without student volunteers and the incredible leadership of outgoing UIW Sustain President, Andrea Gomez-Jackson.

## Student Engagement Center Composting Operation

The environmental impacts of the composting operation efforts in the Student Engagement Center (SEC) dining hall have contributed to major positive consequences. Started in 2022, UIW's composting efforts have diverted 1.8 tons of waste from sitting in landfills. The total weight of waste that has been collected from the UIW community in fall of 2023 adds up to 13,335 pounds. That's equivalent to the amount of energy it would take to charge 648,067 smart phones or to have planted 88 seedling trees grown in an urban environment for a span of 10 years!



Visualization of emissions reductions provided by our hauler, Mission Compost

## UIW's Tenth Annual Earth Fair

On Monday April 22, 2024 the University of the Incarnate Word celebrated the annual Earth Fair. The day's activities helped inform students and community members about how to be environmentally conscious. This Earth day celebration creates a sense of global consideration within the community to help establish a more sustainable future for all.



### The West Gate Circle

UIW's tenth annual Earth Fair was kicked off in the west gate circle. The community was able to participate in several activities where organizations and small businesses along with local campus organizations brought awareness to earthly stewardship. Some of the local campus organizations that attended included, San Antonio Composting Project, UIW Sustain and the Bexar Audubon Society.



## Performance: Land Taken Land Given



UIW alumni Isaac “Papa Bear” Cardenas, Kona of the Tap Pilam Nation, and Jesse Borrego, award-winning Mexican-American actor and UIW alum, showcased a moving performance along with Sr. Martha Ann Kirk, CCVI, that explored the stories of their contrasting ancestors – the Apache people and the European settlers in Texas.

“Recognizing that our ancestors were gifted with land that they cherished and the beauty of creation, we wish to promote studies for clean water, food, air and earth. Werth. We wish to promote compassion for all living creatures and the earth itself,” – Sr. Martha Ann CCVI wish to promote compassion for all living creatures and the earth itself,” -Sr. Martha Ann CCVI



## Sustainability Studies Lecture

### Dr. Pride Abongwa: Our Renewable Energy Future

Dr. Pride Abongwa serves as Assistant Professor of Geosciences in the Department of Natural Sciences at Texas A&M University-San Antonio. Before arriving in San Antonio, he was a Visiting Assistant Professor of Geology at Whitman College in Walla Walla, Washington in 2017 as well as at Oklahoma State University in Stillwater, Oklahoma from 2015-2017. He received his Ph.D. in Geology from Oklahoma State University in Stillwater, Oklahoma in 2014, his M.S. in Hydrology and water resources from IHE Institute of Water Education in Delft, The Netherlands, and his B.S. with honors in Geology from the University of Buea in Cameroon.



Dr. Pride Abongwa's lecture took place Monday April 22, 2024 at 2:30 pm after the Mulcahy award ceremony. His insightful talk, which took place in the Mabee Library auditorium, offered a thorough review of many renewable energy options.

## Awards

### FERA for Biochar Research

One of UIW's Faculty Endowment Research Awards went to Dr. Benjamin Meile for his project, "Biochar, Carbon-Dioxide Removal, and Climate-Smart Entrepreneurship."

This project researches the production and socio-economic benefits of biochar.



Biochar (pictured left) is a carbon-dioxide removal (CDR) technology created through pyrolysis, or the low-oxygen burning of biomass. Not only is biochar, or pyrogenic carbon, a stable, inorganic form of carbon storage since it retains the carbon in the biomass, but it also pulls carbon out of the atmosphere for hundreds of years. Biochar has this high functionality because of its immense porosity. This creates a large surface area and high water retaining capacity which is useful for reducing greenhouse gas (GHG) emissions.

Dr. Miele's project examines the efficacy of pristine biochar for reducing GHG emissions under field-scale applications. It also aims to create fit-for-purpose, functionalized bioactivated charcoal tailored to improving soil as a carbon sink and limiting GHG emissions from the soil matrix by using three different production methods: a top-lit, updraft stove (pictured right), a simple steel retort, and a specialized biochar kiln.



## 2023 UIW Startup Challenge

Hosted by the University of the Incarnate Word H-E-B School of Business and Administration Beckendorf Center for Innovation and Global Entrepreneurship, the challenge's final competition took place on Friday, December 1, 2023. Three teams from UIW walked away with cash prizes to jumpstart their business ventures. The H-E-B School of Business and Administration (HEBSBA) is committed to holding a successful challenge annually to highlight and reward the dedication of entrepreneurs at the University of the Incarnate Word.

This year's Startup Challenge theme was "Impact, Innovation, & Sustainability." Participating teams were tasked with pitching new and creative solutions to real-world problems that support economic

growth. A group of students from UIW Campus Bajío in Irapuato, Mexico took home the 1st place \$8,000 seed money prize for their model of a sustainable automated irrigation system business called 2Hydro Hero (right, below). RGV Freeze Dried Treats, a startup aiming to create pet treats from invasive species in Texas, earned the 2nd place prize and \$2,000 in funding. Finally, GYV, a business focused on holistic, clean energy solutions to promote more sustainable lifestyles, won 3rd place and \$1,000 in funding (top right).



## William Mulcahy Award

The presentation of the William Mulcahy award for Ecological Stewardship followed the Earth Fair festivities. This award was created in 2007 to honor the dedication and leadership shown by the then grounds superintendent William “Bill” Mulcahy. This award recognizes the students and faculty staff who have exemplified this



commitment. This year’s recipient honored with the William Mulcahy award was Sr. Martha Ann Kirk, CCVI. Presenting the award was last year’s recipient, Andrea Gomez-Jackson, President of the UIW Sustain student group, as well as Sr. Martha Ann Kirk’s brother (pictured right).

*“We hope that our teeny gesture may prompt others to build sustainability studies here at the University,” - Sr. Martha Ann Kirk, CCVI*



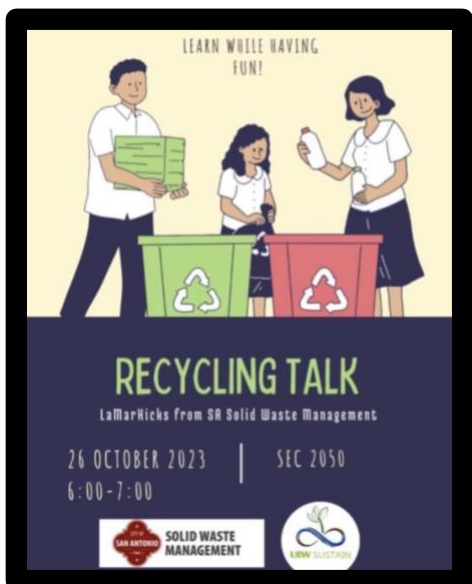
## Leadership In Sustainability

### Solar House Tour

The University of the Incarnate Word invited students to participate in a tour of the on campus solar house. On April 18, 2024 at 5:00pm Daniel Potter, Sustainability Office Operations Manager, led the tour to present the house and its functions to the university's community. The solar house is located to the right of the McDermott Center and to the left of the Barshop Natatorium on the UIW campus.



### Presentation by city of San Antonio's Solid Waste Management Division



Thursday October 26, 2023 the University of the Incarnate Word hosted a talk with LaMar Hicks from the San Antonio Solid Waste Management Division.



Attendees (pictured right) were given reusable grocery bags from the San Antonio Waste Management Division in order to practice better environmental practices.



## Operations, Planning, and Design

### EBSCO Industries Solar Grant

The University of the Incarnate Word was awarded an EBSCO Industries Solar Grant to install solar panels on top of the School of Osteopathic Medicine library. The grant project, titled “Project Helios,” was inspired by Daniel Potter’s years of work with UIW students on developing and implementing solar-powered projects around UIW’s campuses. The international grant process was highly competitive: 5 awardees were selected from over 200 applicants from various countries in the Western hemisphere and Europe. Additionally, thanks to the Inflation Reduction Act, UIW was able to more than double the size of the installation. These solar panels are expected to reduce carbon dioxide emissions by approximately 354 metric tons and reduce electricity expenditures for the library, while raising awareness of the high carbon intensity of libraries in a warming world.

EBSCO will cover initial installation and the university will oversee post installation maintenance. This solar panel project will allow UIW to continue efforts of building a sustainable future across all campuses.

