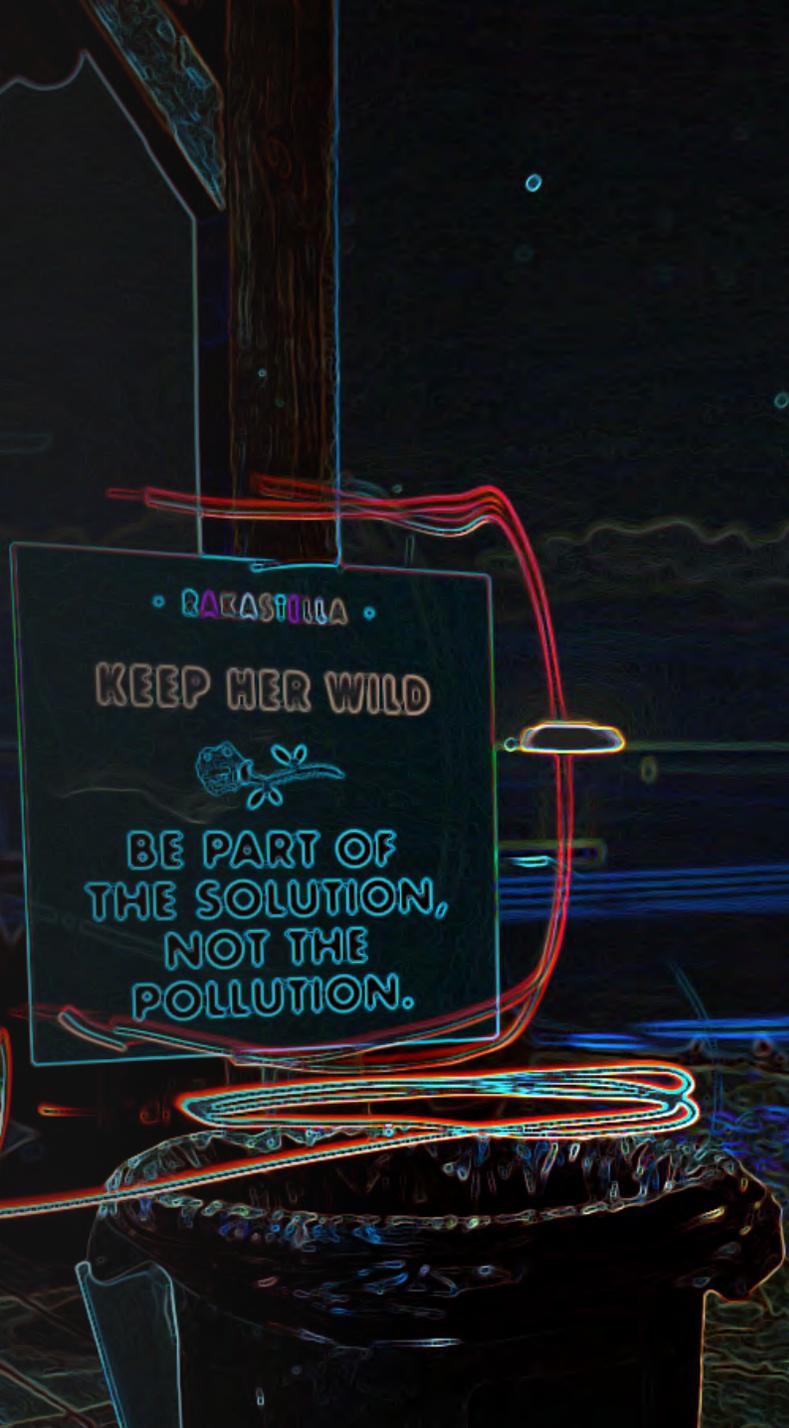


SUSTAINABLE PRACTICES FOR EVENTS & HOSPITALITY INDUSTRY

- 
- A hand-drawn illustration in a sketchy, colorful style. On the left, a sign is attached to a tree trunk. The sign has the text: "RAKASTILLA" at the top, "KEEP HER WILD" in the middle, a small drawing of a lizard on a branch, and "BE PART OF THE SOLUTION, NOT THE POLLUTION." at the bottom. Below the sign is a trash can. The background is dark with some light blue and green lines suggesting a natural setting.
- 12:00-12:03PM – Welcome:** Sea Level Solutions Center, FIU Institute of Environment: Marie Trejos and Tiffany Troxler
- 12:03-12:10PM – Quality of Life Survey:** Alyssa Hernandez
- 12:10-12:20PM – The Science Behind Climate Change:** Marie Trejos
- 12:20-12:30PM – Sustainability Practices for Events & Hospitality Industry to Mitigate Climate Change:** Vivian Belzaguy
- 12:30-12:35PM – How Did We Do? (Zoom Poll):** Alyssa Hernandez
- 12:35-12:40PM – MESAN Resource Monitoring Application Demonstration:** Dr. Susan Jacobson
- 12:40-12:55PM – Panel Discussion and Q&A:** Dr. John Buschman and Vivian Belzaguy; Moderator: Marie Trejos
- 12:55-12:57PM – OPEN FLOOR / Closing Remarks**
- 12:57-01:00PM – Satisfaction Survey (Zoom Poll):** Marie Trejos

SPEAKERS



Marie Trejos
Senior Program Assistant, FIU Sea Level
Solutions Center, Institute of Environment



Tiffany Troxler
Associate Director of Science, FIU Sea Level Solutions
Center; Institute of Environment;
FIU Research Assistant Professor



Alyssa Hernandez,
Assistant Programs Coordinator, FIU Sea Level
Solutions Center, Institute of Environment



Dr. Susan Jacobson
Assistant Professor, Department of Journalism and
Mass Communication, and Steve Cruz Institute for
Science, Media and Technology, College of
Communications, Architecture and the Arts, FIU

PANELISTS



Vivian Belzaguy
Ultra Music Festival's Sustainability Manager and
Founder of Ascendance Sustainable Events



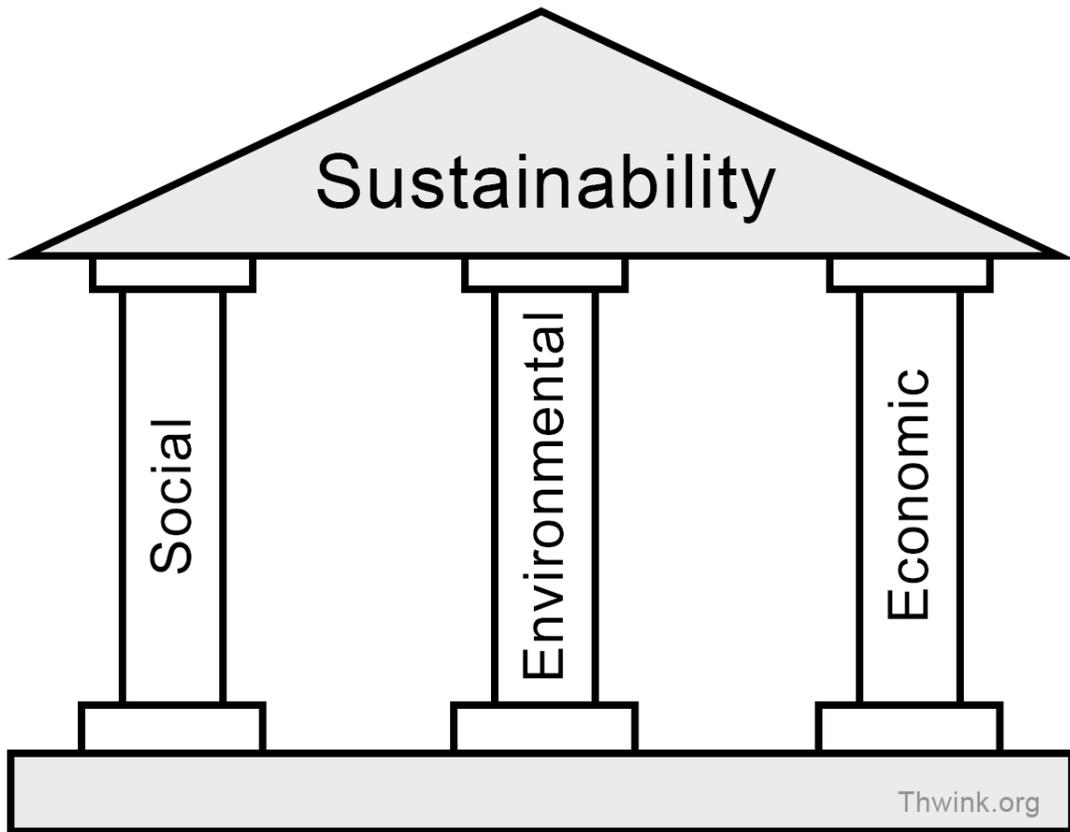
Dr. John Buschman
Professor, Chaplin School of Hospitality & Tourism
Management, FIU

Quality of Life Poll



This project is sponsored by the Miami-Dade County Environmental Education grant program.

WHAT IS SUSTAINABILITY?



“Sustainable development, is development that meets the needs of the present without compromising the ability of future generations to meet their own needs...”
(Brundtland Commission’s report, *Our Common Future*)

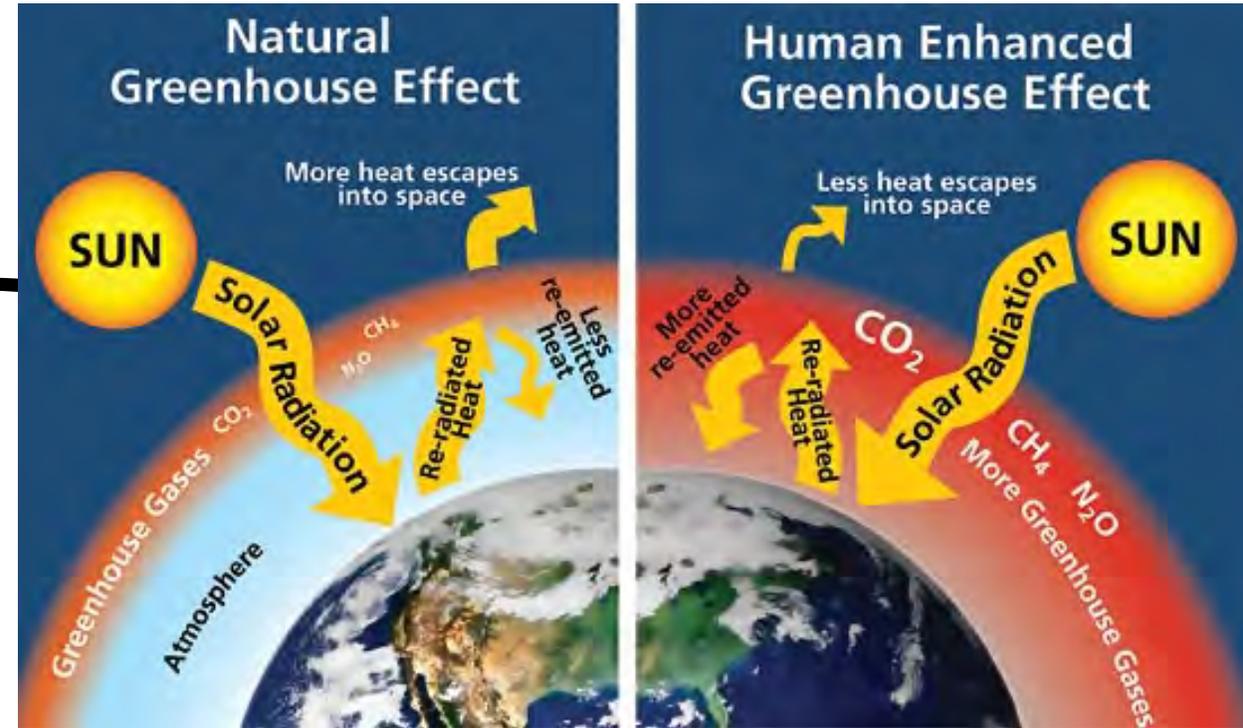
Implement Adaptive Management

- Creative design and critical planning
- Thinking “Closed-Loop-Cycle” processes
- Implementing innovative technology
- Adapting Best Management Practices
- Strong Sustainability emphasizes cultural and ecological values

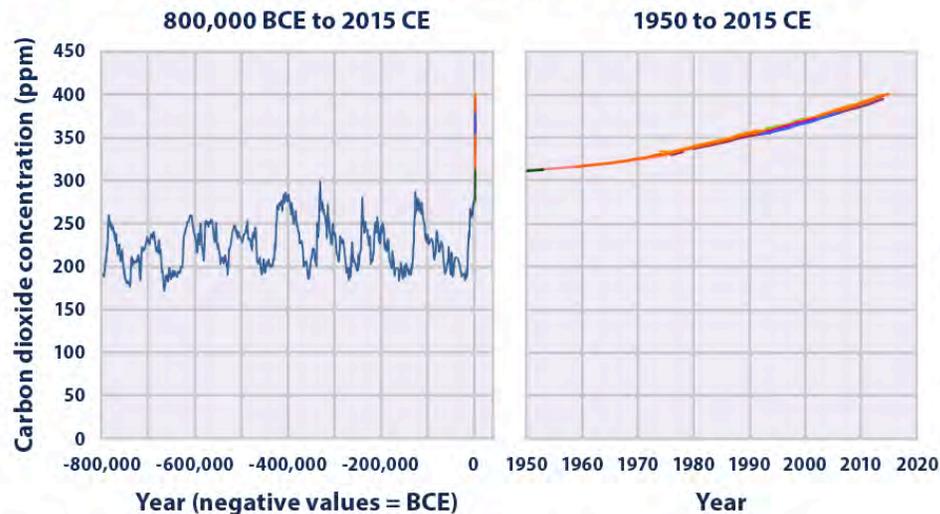
CLIMATE CHANGE

THE BASICS - GREENHOUSE EFFECT

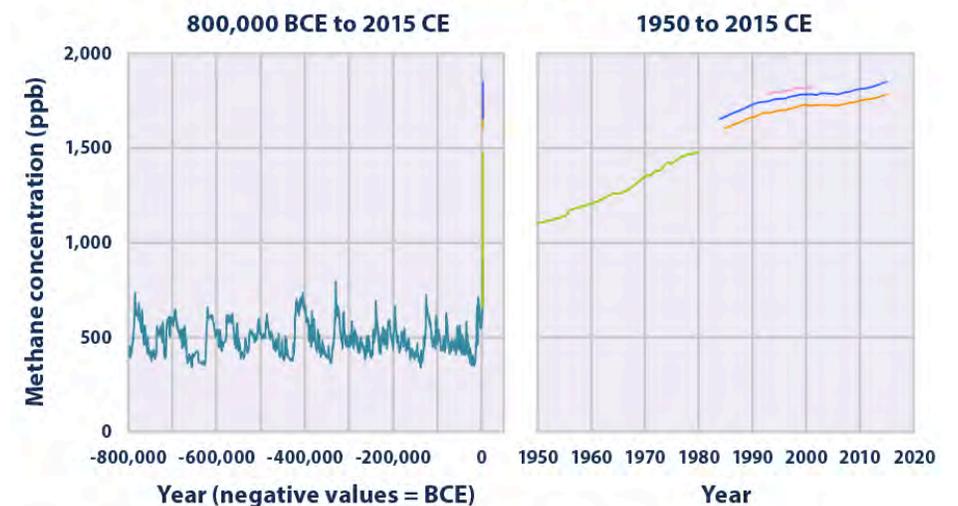
- **Human activities** have increased the abundance of heat-trapping gases in the atmosphere such as Carbon Dioxide, and Methane.
- **Methane (CH₄) is a greenhouse gas that traps 28 times more heat than CO₂**
- Our temperature is on pace to rise 4 Celsius by 2100 (in 80 years) to avoid the worst impacts of climate change we must keep the rise below 2 Celsius



Global Atmospheric Concentrations of Carbon Dioxide Over Time



Global Atmospheric Concentrations of Methane Over Time



CLIMATE CHANGE

RISING TEMPERATURES & SEA LEVEL RISE

- CO₂ released from burning fossil fuels causes our oceans to warm and acidify → causing Coral Reef bleaching → switch to clean energy, more efficient transportation
- Warmer temperatures cause glaciers to melt causing sea levels to rise → flooding coastal zones and pushing saltwater to fresh drinking water ecosystems and aquifers → participate in urban forestry initiatives
- A warmer atmosphere leads to more extreme weather → Increasing intensity, frequency and duration of heat waves and storms → reduce greenhouse gases emissions



“The warming that we’ve seen in the last 30 years is clearly due to human-made greenhouse gases.” -JAMES HANSEN, *Former director, NASA Goddard Institute for Space Studies*

CLIMATE CHANGE

NATURAL RESOURCE USAGE

- Due to population growth and increasing demands, we are depleting our natural resources much faster than they can be naturally replenished.
- Food systems across the world account for almost 30% of global greenhouse gas emissions, use the most of freshwater resources, and contribute to deforestation and biodiversity loss.
- By the year 2030, Floridians will need 1.3 billion more gallons of water every day, more than a 20 percent increase compared to 2010 demands (the Florida Chamber Foundation).

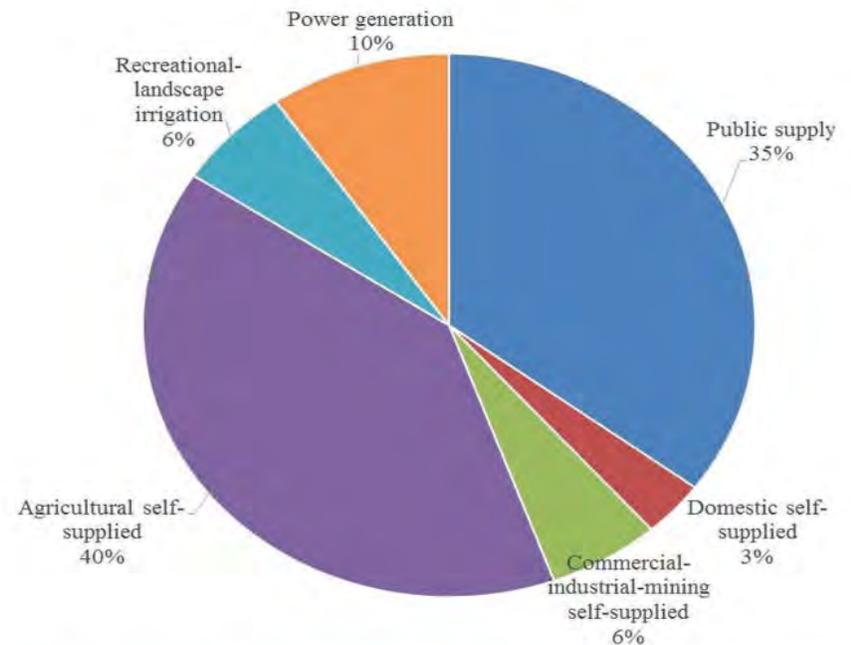
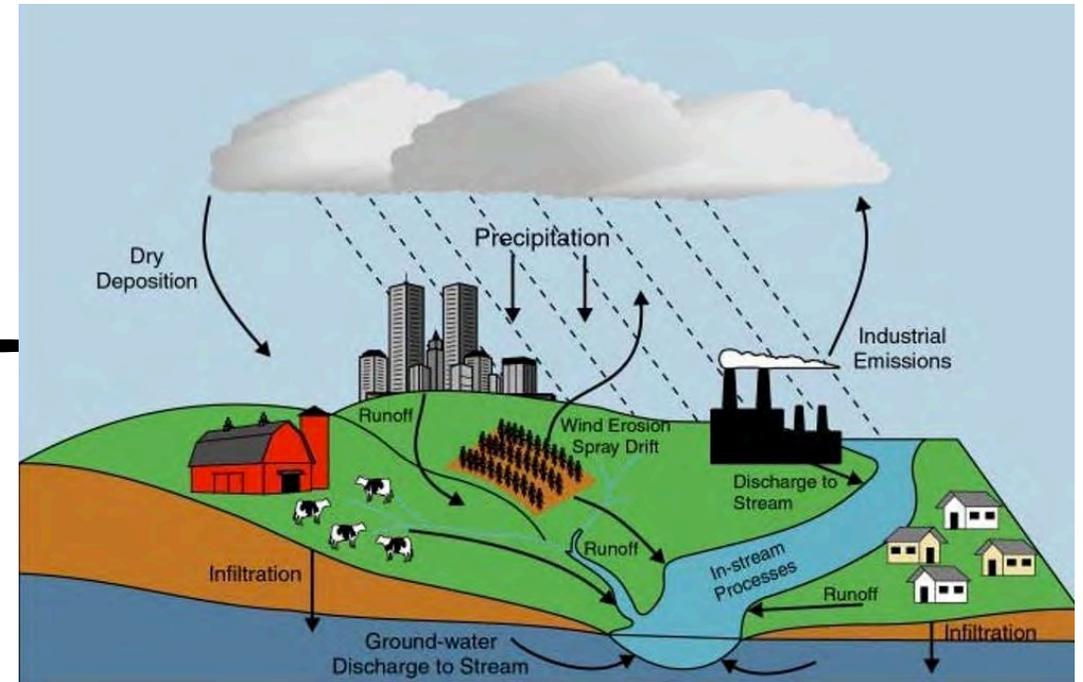


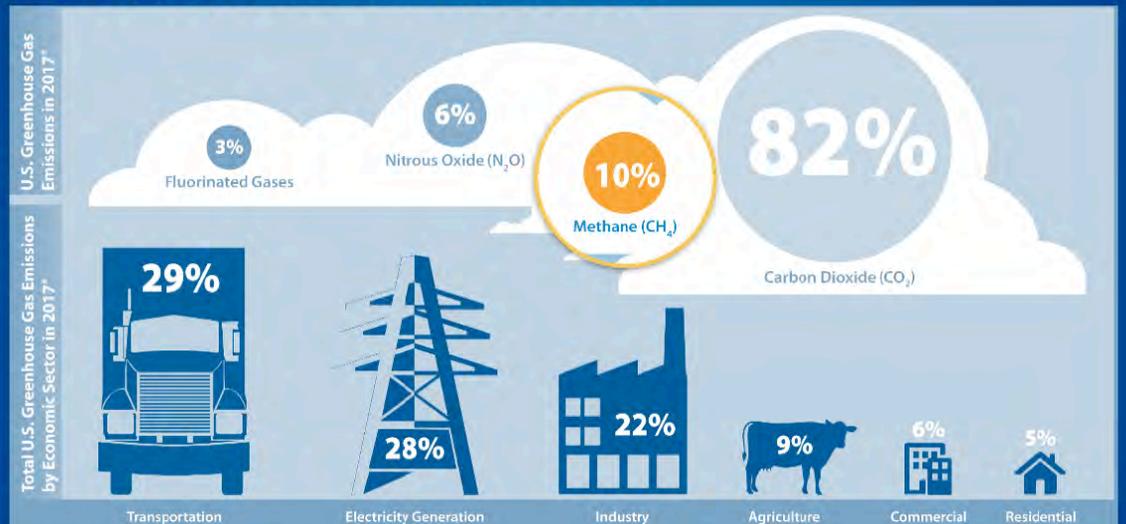
Figure 1. Freshwater withdrawals in Florida, 2010.
Source: USGS (2013)

CLIMATE CHANGE NUTRIENT POLLUTION & FOOD PRODUCTION

- Nutrient runoff from leaching fertilizers and raw sewage causes algal blooms → Depleting oxygen levels in water causing the death of fish and other aquatic life → control use of fertilizers and nutrient runoff from entering our waterways
- About 30% of food produced for human consumption is wasted
- When **food scraps** or other organic material decomposes in landfills, they **generate methane gas** → divert food from landfills by donating to food banks, shelters, or **composting**
- **Landfills are the third largest source of methane emissions in the U.S.** → **divert waste from landfills**
- Save carbon emissions from processing and transportation → Shop local produce



U.S. Greenhouse Gas Emission Sources



*Percentages may not add to 100% due to independent rounding and the way the inventory quantifies U.S. territories (not shown) as a separate sector.

Source: Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2017

CLIMATE CHANGE - SOLID WASTE & MARINE DEBRIS

- Plastics are made from petroleum products → producing more Carbon Dioxide emissions
- Say no to single use plastic → sell reusable water bottles or cups → recycle materials
- Stormwater runoff picks up debris along the way polluting waterways and oceans → plastics breakdown to microplastics entering our food chain
- Most plastics end up as marine debris

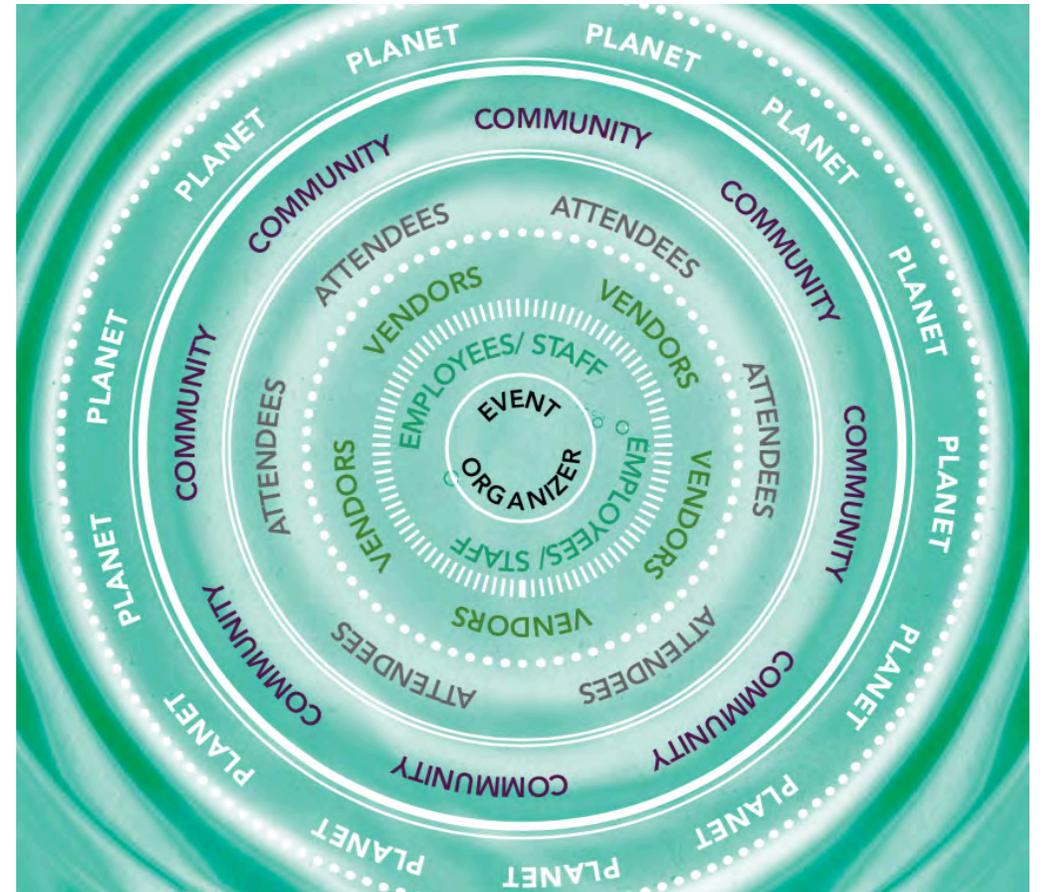
By 2050, plastic in the oceans will outweigh fish predicts a report from the Ellen MacArthur Foundation, in partnership with the World Economic Forum.



THINKING ON AN EVENT'S EFFECTS ON IT'S COMMUNITY

1. CREATING A POSITIVE RIPPLE EFFECT

- △ **EVENT ORGANIZER:** Adopts sustainable values, directing their team to do the same.
- △ **EMPLOYEES/ STAFF:** Enact new values into operations, initiatives and vendor trainings.
- △ **VENDORS:** Align with values, learning and enacting new sustainable strategies.
- △ **ATTENDEES:** Observe and participate in sustainability initiatives, learning new behaviors.
- △ **COMMUNITY:** All above carry learnings beyond the event, sharing with their community. Community learns and appreciates event efforts. Expectations for other events heighten.
- △ **PLANET:** Environmental responsibility and ownership are heightened, shifting the community's behavior impacting the environment.



KEY WAYS EVENTS CAN BECOME MORE SUSTAINABLE

1. PREVENT POLLUTION

TIPS

- △ Create bans against using certain items such as styrofoam, confetti, glitter or balloons, utilizing the opportunity to educate on how these materials can easily become litter and marine debris.
- △ Hire a reliable cleaning company.
- △ Communicate attendee expectations before the event via email and/ or social media.
- △ Have visible signage throughout the event reiterating the importance of not littering.



KEY WAYS YOUR EVENT CAN BECOME MORE SUSTAINABLE

2. WASTE REDUCTION



TIPS

- △ Think about the kinds of waste your event creates. Ask yourself: what fills our trash cans and dumpsters?
- △ Find reusable solutions or ways to repurpose these items.
- △ Avoid single-use items as much as possible, but if you must use single-use, make sure the items are recyclable or compostable by your local facilities.
- △ Be sure to consult your local recycling and composting facilities about how to properly separate these waste streams. These instructions must be visibly posted for attendees, and your cleaning company must also be trained on how to properly process this waste so that it is not rejected by the facility.

KEY WAYS YOUR EVENT CAN BECOME MORE SUSTAINABLE

3. NATURE CONSERVATION

TIPS

- △ If your event takes place at an outdoor venue, take the time to consult a local naturalist to see if there are unique natural elements you can help protect or restore.
- △ Even if your event takes place indoors, choose an environmental cause that your team and attendees can engage with such as ocean conservation, reforestation or wildlife protection.



KEY WAYS YOUR EVENT CAN BECOME MORE SUSTAINABLE

4. NATURAL RESOURCE MANAGEMENT



TIPS

- △ Always select ground power or renewable energy (like solar power or biofuels) over regular diesel generators.
- △ Encourage attendees to use public transport, trains or carpooling to cut emissions from travel.
- △ After you've reduced unnecessary carbon emissions, consider an offsetting program (like tree planting!) to reduce the rest.
- △ Choose local, organic food when possible and donate unsold food to local charities. You can also compost food scraps to eliminate food waste!
- △ Check your wood, paper and merchandise providers for sustainability certifications or sustainable sourcing values.

KEY WAYS YOUR EVENT CAN BECOME MORE SUSTAINABLE

5. COMMUNITY ENGAGEMENT

TIPS

- △ Involve your marketing team. Those responsible for creating your brand as it stands today, should be the ones developing the look and feel of your sustainability messaging in order to engage attendees with familiar imagery and voice.
- △ Assign a member of your team who cares about the environment as your sustainability champion to assist in engaging internal team members and external partners.
- △ Find a local non-profit organization that aligns with your sustainability mission to become an event partner.



KEY WAYS YOUR EVENT CAN BECOME MORE SUSTAINABLE

6. PUBLIC HEALTH - DURING COVID-19

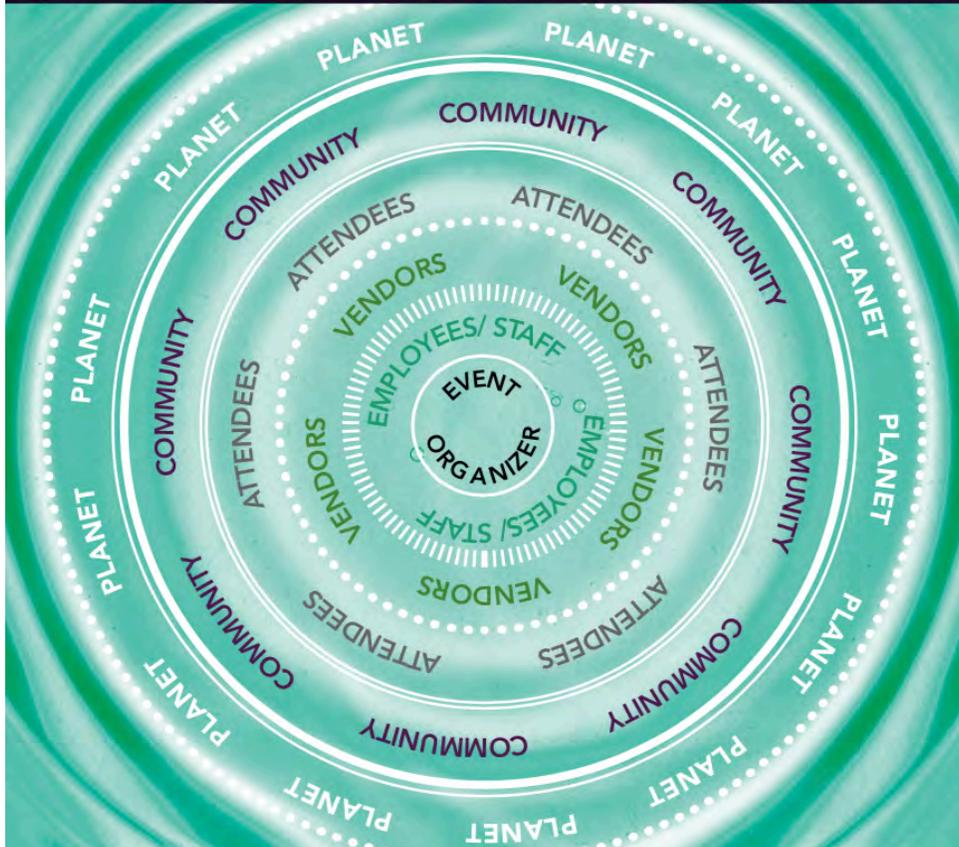


TIPS

- △ Provide hand washing stations and make sure soap and water is always well-stocked.
- △ Provide hand sanitizing stations where soap and water cannot be provided and keep these well-stocked.
- △ Sell hand sanitizer at merchandise stations.
- △ Communicate availability and locations of all public health initiatives to attendees.
- △ Encourage attendees who become ill prior to the event to stay home by offering refunds or ticket resale programs.

THINKING ON AN EVENT'S EFFECTS ON IT'S COMMUNITY

WHAT WILL YOUR RIPPLE LOOK LIKE?



NEGATIVE IMPACT

POSITIVE IMPACT

Enable pollution	Prevent pollution
Create unnecessary waste	Reduce waste
Damage natural habitats	Protect natural habitats
Overly deplete natural resources	Responsibly utilize natural resources
Condone unconscious behavior	Educate attendees on conscious behavior
Jeopardize your reputation and relationships	Take ownership, engaging your community
Encourage other events to behave irresponsibly	Lead by example for other events

How Did We Do?

Poll



This project is sponsored by the Miami-Dade County Environmental Education grant program.

MESAN

Resource Monitoring Mobil App



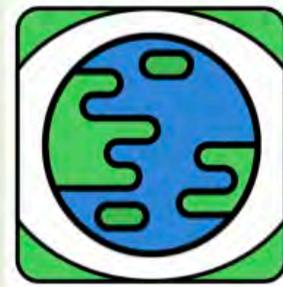
MESAN
Miami Environmental Science Action Network



This project is sponsored by the Miami-Dade County Environmental Education grant program.



Web Link: <https://mesan.miami/monitor>



MESAN

Miami Environmental Science Action Network

MESAN RESOURCE MONITOR

Compost • Recycling • Landfill • Instructions

Complete for all 3 fields on the top menu

Composting Monitor

Name

Email

example@example.com

SIGN UP TO
PARTICIPATE IN
OUR NEXT CITIZEN
SCIENCE EVENT

<http://miamistories.net/projects/>



SCAN ME

Panel Discussion and Q&A



This project is sponsored by the Miami-Dade County Environmental Education grant program.

PANELIST QUESTIONS

"Conservation biology, resource management, ecological restoration, and climate change adaptation require us to act with incomplete knowledge, a tolerance of uncertainty, and a mix of science, art, intuition, and information (Soule 1985)".

- How have events traditionally been held and how have they been wasteful? How problematic they are for the environment?
- What are some trends/ misconceptions you find business owners or festival organizers have when trying to become sustainable?
- What is the process for an event organizer or anyone in the hospitality industry to start diverting food from landfills? Can you give us some examples how you've worked with local organizations and student volunteers?
- Can you share with us how you've engaged participants in environmental behaviors with social media strategies?
- What are some ways events can conserve energy and water? How do you measure/ keep track you are being as sustainable as possible?
- How is the future of sustainability affected in the Hospitality Industry with Coronavirus? Especially in large and mega events?
- In all your hospitality & event industry what are the biggest sustainability achievements you've seen?
- Do you provide options for sustainability collaboration and fundraising?

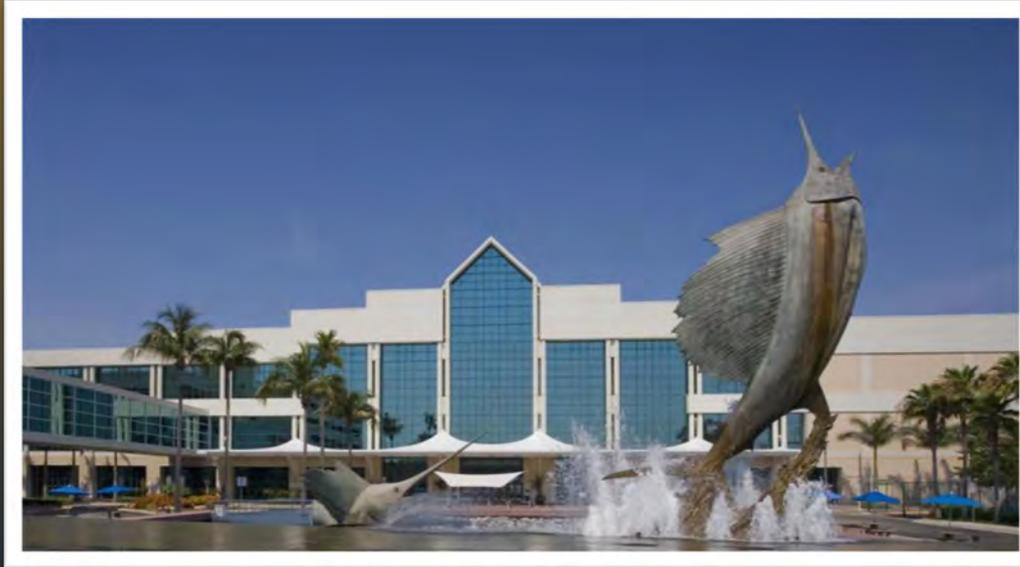
Food Rescue at SobeWFF



Food Rescue at SobeWFF



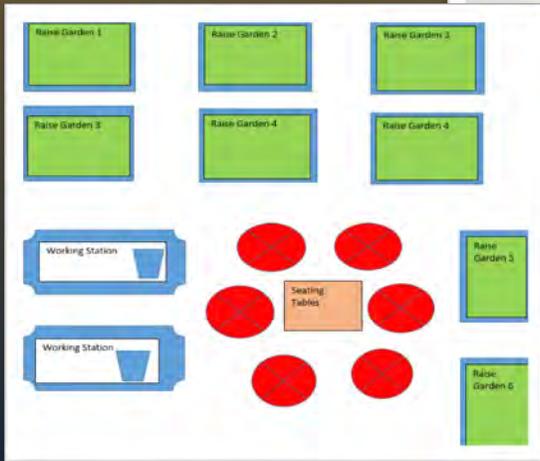
Anaerobic Digesters



Diane the Digester at BCCC

The Living Laboratory at BBC

Interdisciplinary Composting and Specialty Gardening with CASE



Hydroponics & Aeroponics



Food Recovery at Food Industry Shows



CSR Components for Meetings & Events



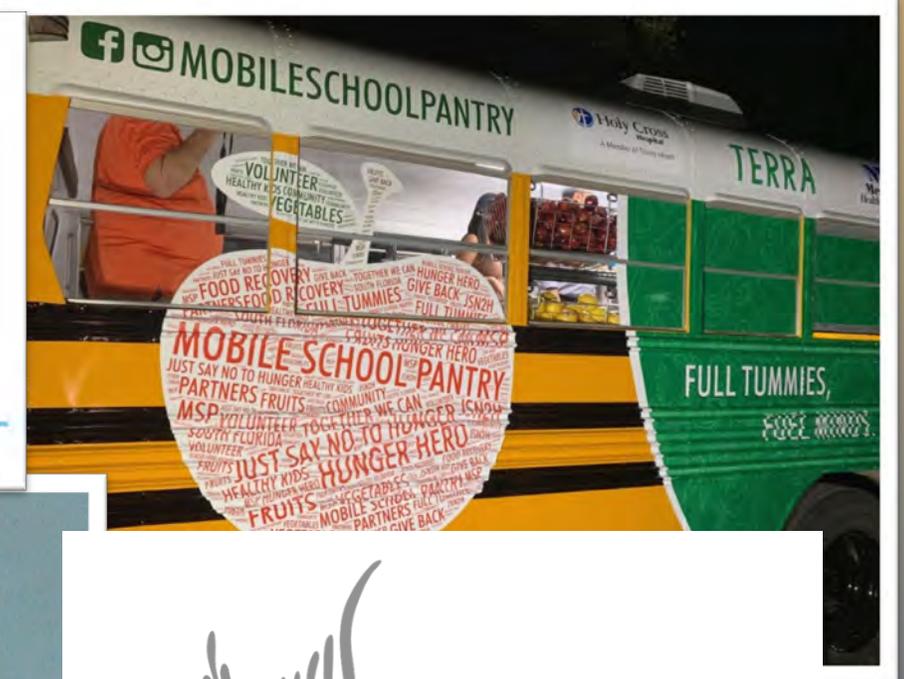
McKinsey
& Company



NEXT HORIZON
The Campaign for FIU

FIU | Chaplin School of
Hospitality & Tourism
Management

Collaborating with Community Food Relief Charities



Educating the Industry

**Focus
Miami**
Your Trusted Source
of Event Professionals



NATIONAL ASSOCIATION FOR
CATERING AND EVENTS

NEXT HORIZON
The Campaign for FIU

FIU | Chaplin School of
Hospitality & Tourism
Management

James Beard Foundation's Full-use Kitchen



World Wildlife Fund/AHLEF

2019 Champion's Guide

HOTEL | KITCHEN

Fighting Food Waste in 16 Weeks:
A Champion's Guide



26

Phase 1: Building a Task Force

Phase 2: Setting a Baseline

Phase 3: Testing Interventions

Phase 4: Institutionalizing Change

Engaging with Industry outside SFL



Students explore sustainability efforts by Disney, Orlando businesses



Closing Remarks

Resources



This project is sponsored by the Miami-Dade County Environmental Education grant program.

SIGN UP TO
PARTICIPATE IN
OUR NEXT CITIZEN
SCIENCE EVENT

<http://miamistories.net/projects/>



RESOURCES

FIU WEBSITE

Download this presentation slides, view webinar recording, and additional resources

SCAN ME



Miami-Dade Environmental Education Grant

The Miami-Dade Environmental Education Grant was awarded to the [Sea Level Solutions Center \(SLSC\)](#) in the FIU In Environment, a university preeminent program.

The grant supports an accelerated education initiative to inform Miami-Dade residents and businesses about our fragile environment and promote stewardship to help them safeguard their environment and quality of life, in the face of pressures of population increase and climate change impacts such as sea-level rise. We emphasize on working directly with communities, linking top scientists, educators, students, and municipal leaders, to find and implement solutions-oriented opportunities. We have included stipends for “neighborhood ambassadors” to extend our reach into the residential and business community even further and have engaged the [Global Learning for Global Citizenship](#) program at FIU to maximize new outlets for reaching students. Our trainings approach science and technology into experiential fun activities that provide the tools and skills needed to adapt and persevere through the challenges of climate change in our region.



Our identified priority activities focus on 1) water pollution, water conservation and drinking water quality; 2) urban f

RESOURCES - ASCENDANCE SUSTAINABLE EVENTS FREE GUIDE

<https://www.greenyourevent.com/>

Download your free guide "Elevating Event Sustainability"



Satisfaction Survey

THANK YOU



This project is sponsored by the Miami-Dade County Environmental Education grant program.