# GREEN SPORTS PLAYBOOK

























# PLAY-BY-PLAY

Introduction	2
Infrastructure, Signage, & Branding	
Athletic Facilities Energy Conservation	5
Grounds Management	6
Engagement Efforts	<b>7</b>
Data, Reporting, & Tracking Progress	9
Contracting & Procurement	10



# INTRODUCTION

America East universities are leaders in campus sustainability initiatives, from efforts to cut carbon emissions to diverting disposed waste to a higher and better use. We believe our athletes should have clean outdoor spaces to practice, train, and compete. Sustainability is a key part of our commitment for the future.

Collegiate athletic programs are making great strides to reduce negative environmental impact from large sporting events to make game days greener by:

- Utilizing alternative fuel and EV fleet
- Investing in infrastructure and educational resources to reduce waste
- Optimizing process flow and associated traffic
- Identifying greener ways to produce athletic apparel
- Showcasing better recycling habits for fans

America East universities are demonstrating innovation towards sustainable sports through many key partnerships such as:

- University of Massachusetts, Lowell and Green Sports Alliance
- University of Vermont and "Rally's Green Team" hockey program

America East's Sustainability Network in partnership with Casella is pleased to introduce the Green Sports Playbook to highlight best practices and strategies to make our sports complexes, games, and events even greener.

This book is designed to encourage all America East universities to integrate more sustainable practices into athletic programs through creative ideas, solutions, and resources to meet their own unique set of challenges and circumstances.

We are pleased to share these practices and hope you will join us in using the Green Sports Playbook as a guide for making America East athletics more sustainable.

# INFRASTRUCTURE, SIGNAGE, & BRANDING

# **EQUIPMENT**

- Invest in efficient waste equipment that will collect material, maximize capacity, reduce hauls, and reduce carbon footprint
  - > Compactors, Grind2Energy, and other equipment

# X CONTAINER STANDARD

- · Implement consistent container design across venue
- Create standard and consistent signage for containers/arenas
- Establish a container placement plan that meets foot traffic needs by location:
  - > Outdoor fields and stands
  - > Indoor rinks and stadiums (Concourse, Concessions, Boxes, Club Rooms, Executive Suites, Dining/Bar Areas)

# **EDUCATION**

- Sustainability-focused games during events to include fans of all ages
- Involve athletes to engage with fans
- Educational wraps for waste equipment/compactors to illustrate sustainable efforts

# X SIGNAGE AND BRANDING

- Incorporate broadcasts, commercials, ice logos, streaming, and wraps to promote sustainability efforts and partnerships
- Logos on containers are an extension of athletic branding and a way to enhance fan experience, which further drives partnership between athletics and sustainability



# INFRASTRUCTURE, SIGNAGE, & BRANDING



## **UMASS LOWELL**

#### **EQUIPMENT**



The two Grind2Energy food waste systems on campus collect organic food waste that is eventually transformed into renewable energy and nutrient rich fertilizer after undergoing an anaerobic digestion process. One Grind2Energy system lives at the Tsongas Center Arena.

#### **BRANDED CONTAINERS**



Custom receptacles for the Tsongas Center were designed to educate fans and provide clear and consistent guidelines for fans to reduce contamination. The sloped tops eliminate the accumulation of trash and recyclables while the entire container is made of recycled material.

#### **EDUCATION TO ENGAGEMENT**



Student Sustainability Ambassadors volunteer during sporting events to engage with fans and promote sustainable initiatives like educating and ensuring proper recycling collection during each event. The Ambassadors help answer recycling questions and guide fans toward better recycling habits. At the end of an event they weigh the recyclables and record the data.





# ATHLETIC FACILITIES **ENERGY CONSERVATION**



# FEATURED **CHAMPIONS**

#### **NEW JERSEY INST. OF TECHNOLOGY**

#### **HYDROELECTRIC POWER**



Wellness and Events Center will be from hydroelectric power through Engie's portfolio-based renewable energy program. High efficiency LED lighting and controls have been installed to optimize lighting, heating & cooling, fresh air flow, exhaust, and scheduling so that maximum energy efficiency is achieved. Electric vehicle charging stations have also been installed in the center's designated parking garage

with free charging.

100% of electricity used in the



# **UMASS LOWELL**

#### **EV CHARGING INFRASTRUCTURE**



UMass Lowell pursued state funding to subsidize the cost of additional battery electric vehicles dedicated to athletics to continue electrification of the university fleet.



# **ACCESS INCENTIVES**

- Engage with representatives from utility partners and state entities
- Understand and optimize incentive programs and funding opportunities
- Access energy incentives from utility partners to enhance EV charging infrastructure across campus, including athletic parking facilities

## **REDUCE OPERATING COSTS**

- Optimize energy efficiency measures at athletic facilities
- Outline long-term cost-savings at the facility

## **PROMOTE SUSTAINABILITY**

- Highlight signage and messaging at athletic facilities and events
- Each event is an opportunity to engage with campus, local community and visitors



# GROUNDS MANAGEMENT



## **ELECTRIFICATION OF GROUNDS FLEET**

- Procure battery electric lawn mowers that include a solar canopy that not only self-charges the mower, but also protects the landscaper from solar radiation
- In addition to electrifying the grounds fleet, hand-held maintenance tools and equipment can also be updated to electric models



## **LANDSCAPING ALTERNATIVES**

- Sheep and goats for mowing sloped hillsides and difficult terrain that prevents safety concerns for grounds staff
- Pollinator habitats promote bee friendly environments while supporting native wildflower species



## **BIO-RETENTION AREAS**

 Rain gardens and basins containing natural landscaping features provide on-site treatment of storm water runoff from impervious surfaces such as campus parking lots



# FEATURED CHAMPIONS

# **BINGHAMTON UNIVERSITY**

#### WETLANDS EXPANSION

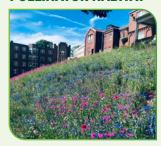


Across Binghamton
University's campus, there
are various initiatives aimed
at protecting and conserving
water as a resource. Among
numerous wetlands and
bioswales across campus to
help with water retention and
filtration, one of the most
recent and highly visible
efforts was the installation
of a wetlands expansion
near their athletics field.



## **UMASS LOWELL**

#### **POLLINATOR HABITAT**



UMass Lowell has, and continues to create, numerous pollinator sanctuaries campus wide. The flowers in these pollinator sanctuaries bloom throughout the growing year. They will provide a consistent source of food and refuge for pollinators while assisting with difficult areas for grounds management to maintain.





# ENGAGEMENT EFFORTS

# **X** RECYCLING AMBASSADOR PROGRAM

- Recruit student ambassadors to increase recycling and waste diversion during events
- Student ambassadors direct waste stream flow across the arena, help answer questions, collect and analyze data
- Athlete involvement engages fans and weaves in the messaging
  - > Can be included in overall waste contract, to include sponsorship

# X EDUCATIONAL APP FOR STUDENTS

Recollect Waste Wizard app and Waste Sorting Game

# ESTABLISH "GREEN" EVENTS - FOCUSED ON EDUCATION

- · Campus and community recycling and donation drives
- Athletic equipment/memorabilia surplus sales
- Sustainability featured game days

# X SOCIAL MEDIA POSTS

- Promote student athlete initiatives and events
- Share metrics for recycling drives

# X WASTE/RECYCLING AUDITS

 Post game audits will help to clean up the material, collect data, and identify ways to make program improvements

# X COMMUNITY ENGAGEMENT IDEAS

Trees for 3's: A tree planting initiative for the basketball program





# ENGAGEMENT EFFORTS



## **UNIVERSITY OF MAINE**

#### **STUDENT GREEN TEAM**



Through the UMaine Office of Sustainability and the Athletics Department, the student Green Team spearheads all zero-sort recycling at home football games. The Green Team consists of a mix of student volunteers who receive credit for community service as well as paid workers who belong to UMaine club sport teams fundraising for club budgets.

### **UNIVERSITY OF VERMONT**

#### **SUSTAINABLE EVENTS**



At UVM's annual "Green Out the Gut" event, UVM Eco Reps and the Zero Waste office invite the UVM community to cheer on the Vermont Men's Ice Hockey team and teach people how to "junk your trash." (The "Gut" is short for UVM's Gutterson Field House.) They then follow up with a waste audit. As part of the 2020 audit, student interns and Zero Waste staff met with senior administrators to examine Athletics' operations and determine best practices.



#### **UNIVERSITY AT ALBANY**

#### **FILL IT FORWARD**



Student athletes and staff participate in "Fill it Forward," a refillable water bottle initiative that reduces single use plastic and funds clean water projects. Participants tag their water bottles and track their impact using the Fill it Forward app to donate to charitable initiatives.





# DATA, REPORTING, & TRACKING PROGRESS



## **UMASS LOWELL**

#### SUSTAINABILITY DASHBOARD



UML tracks waste data, which allows the university to track their data in real time, enabling to further hone and align with the Sustainability Tracking, Assessment & Rating System (STARS) criteria.

#### **AASHE STAR RATING**



The Sustainability Tracking, Assessment & Rating System (STARS) is a transparent, self-reporting framework that measures the sustainability performance of colleges and universities around the world. Institutions are recognized based on their overall STARS score as Bronze, Silver, Gold or Platinum institutions.

# X

### SUSTAINABILITY DASHBOARD

- Track programs and operations, promote progress to campus, generate reports
- Internal and external sustainability tracking and reporting tool
- Utilize dashboard to track trends and identify areas for efficiency improvement
- Make strategic decisions based on volume reports to upgrade infrastructure as needed

#### **AASHE STARS**



- Universities in the America East can gain AASHE reporting credits in addition to sustainability measures
- Opportunity for campuses to gain credits through multiple categories, boosting the university's overall STARS rating
- Use ASHEE reporting as a platform for program development by identifying areas of improvement







# CONTRACTING & PROCUREMENT



 Guide financial contributions from vendors to directly support infrastructure and program enhancement for athletics

# STAKEHOLDER GROUP

- Sustainability Department is included in the decision-making
- Establish internal partnerships amongst campus departments
- Leverage external partnerships to facilitate program implementation

# X STADIUM PRACTICES

- Green cleaning contract and products used at the stadiums
- Sustainability-focused giveaway items only (no single-use)
- Dining procurement practices:
  - > Implement reusable container programs
  - Purchasing (reduced packaging, recyclable, BPI certified)
  - > Locally-sourced food/beer



## **BINGHAMTON UNIVERSITY**

#### SUSTAINABILITY INITIATIVES



Savings or resources accrued from sustainability initiatives are rolled back into funding sources directly related to the initiative (e.g. utilities or recycling), allowing to better support their efforts.

#### **CATERED EVENTS**



Catered events have options for locally sourced foods.
Catering options available for compostable and recyclable materials only, for minimal and zero waste events.
Concession stand paper products are all compostable.

#### **DIGITAL TICKETS**



To further cut back on event waste, Binghamton effectively switched from paper to digital tickets only.







ESTABLISHED 1975

# Casella is proud to support and work in partnership with the America East Conference to help make game days greener.

We have worked collaboratively with higher education partners to maximize operational, environmental and economic efficiency across campus. Learn more at **casella.com** and **contact us** for more information about how we can support your efforts.

# Follow us





























