## ADVANCING SUSTAINABILITY IN SPORT : MATERIALS RECYCLING



**UBC SEEDS RESEARCH PROJECT** 

## INTRODUCTION



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# WHY WE CHOSE THIS PROJECT?

## WHAT IS "SUSTAINABILITY"



#### WHY SPORT AND THE ENVIRONMENT?



## WHAT IS GOING ON AT OTHER UNIVERSITIES?

## **GREEN SPORT ALLIANCE PARTICIPANTS**

#### LINULY UNIVERSILY

Farmingdale State College, SUNY Flathead Valley Community College Florida International University Florida State University\* Franklin Pierce University George Mason University\* George Washington University Georgetown University Georgia Southern University Gonzaga University Grand Valley State University\* Indiana State University Indiana University\* Inver Hills Community College Jackson State University Kent State University Lafayette College Lamar University Lehigh University Lewis University Louisiana State University Marguette University\* Marshall University Miami University\* Middle Tennessee State University Missouri State University\*

Texas A & M University - Corpus Christi Texas State University Texas Tech University Towson University\* University at Albany\* University of Akron University of Alabama University of Alabama at Birmingham University of Arizona\*

#### University of British Columbia\*

University of California, Los Angeles University of California, Santa Barbara\* University of Central Florida University of Cincinnati University of Florida\* University of Florida\* University of Houston\* University of Idaho University of Idaho University of Illinois University of Illinois at Chicago\* University of Illinois at Chicago\*

טווויסוטוני טו וסאמט מג אוווויענטוו University of Texas at Austin\* University of the Pacific University of Tulsa University of Washington\* University of Waterloo University of West Florida University of Wisconsin, Eau Claire University of Wisconsin, Green Bay\* University of Wisconsin, Madison University of Wisconsin, Oshkosh\* **Utah State University** Vanderbilt University Villanova University Virginia Commonwealth University\* Viterbo University Washington State University Weber State University\* West Virginia University Western Carolina University Western Kentucky University\* Western Michigan University Winona State University Winthrop University **Xavier University** Yale University\* Youngstown State University

Source: http://greensportsalliance.org

### **OHIO STATE UNIVERSITY**





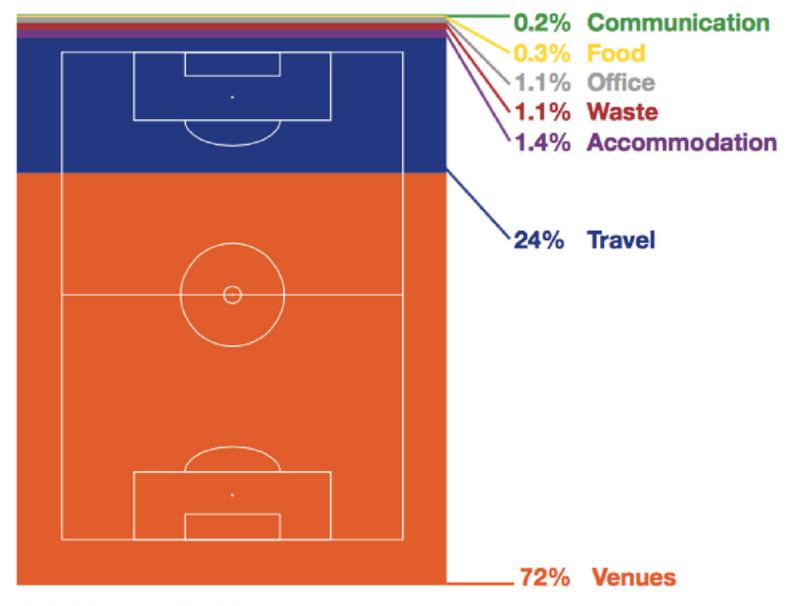
# GO PURPLE.



## UNIVERSITY OF WASHINGTON

# WHAT IS GOING ON AT UBC?

Carbon Footprint of UBC Athletics & Recreation Thunderbirds teams, events, and venues for the 2011/12 season.



Source: Life Cycle Assessment, Matt Dolf

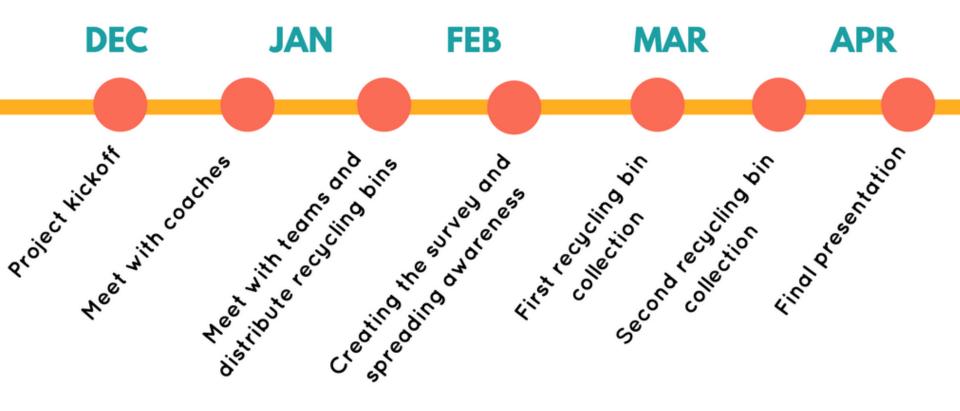
# **OUR RECYCLING** PROJECT

# Project Goals

- Implement a Recycling Program with 4 Varsity Teams
- Create a Survey to Assess Athlete's Understanding of Sustainability
- Spread Awareness to Student-Athletes, Coaches, and the Greater Community
- Make Recommendations for Future Research and Projects



### TIMELINE



## UBC ATHLETICS GOALS



INCREASE PARTICIPATION



DELIVER EXCELLENCE ON THE NATIONAL AND WORLDWIDE STAGE



BUILD SCHOOL SPIRIT



NUTURE A STRONG SENSE OF COMMUNITY



CULTIVATE AN INSPIRED WORKPLACE WHERE STAFF ARE AT THEIR BEST

Source: http://www.gothunderbirds.ca

#### UBC ZERO WASTE GOALS



IMPLEMENT MULTI-STREAM RECYCLING STATIONS AND COMMUNICATIONS ACROSS CAMPUS BY END OF 2015, TARGETING FOOD SCRAPS COLLECTION BY MID-2015.



INCREASE OVERALL DIVERSION RATES TO 70 PER CENT DIVERSION BY 2016, AND 80 PER CENT DIVERSION BY 2020.

DECREASE OPERATIONAL WASTE DISPOSAL TO LANDFILL/INCINERATION STEADILY, DESPITE CAMPUS GROWTH, TOWARD THE LONG-TERM ASPIRATION OF A ZERO-WASTE CAMPUS.

Source: https://sustain.ubc.ca



#### WHY TEXTILES RECYCLING?

#### **Global Impacts**

#### Local Impacts

## MATERIALS RECYCLING





#### HOW ARE OUR TEXTILES RECYCLED?

## Re-use

Down cycle

Upcycle

#### PARTICIPANTS

100% ——

75%					
50%					
25%					
0%	W Volleyball	M Volleyball	W Basketball	M Basketball	Other sports

## **RECYCLING RESULTS**

Women's Teams 21% 30 lbs

Men's Teams 11% 16 lbs

VE LIGHTNING

Welcome Centre 68% 94 lbs



## SURVEY...

Assesses the sustainability literacy of varsity athletes, to better understand how they view the environmental impact of their sport.

Asks...

- Athlete's understanding of sustainability
- Perception of team and venue's environmental impact
- Solutions to decrease environmental impact



Questions...

- When you hear the word sustainability, what comes to mind?
- How do you think your sports team impacts the environment?
- What suggestions do you have for your team to improve it's environmental impact?



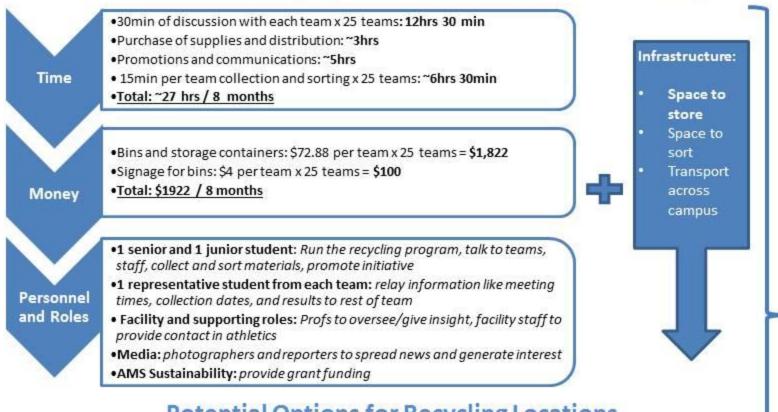


#### SPREADING AWARENESS





#### **UBC Recycling Implementation Model**



#### **Potential Options for Recycling Locations**



#### Transcontinental

- -accepts used and unused
- -will process branded jerseys
- -will pickup
- -possibility for buy back
- -partnership
- -located in Surrey, BC



#### Cann-Amm Exports Inc

-accepts used and unused
 -clothing is all downcycled
 -plant is based in India

#### Assumptions:

- The amount of clothes per team will be consistent, and therefore the sorting time per team will be consistent
- All clothing would have otherwise been thrown out
- Hanging scale will be used to weigh
- Each team will be given one 32 Gallon Green Brute Container with lid

2.2 lbs/athlete/semester = 4.4 lbs/athlete/year (assume 8 month school year)

= 4.4 lbs/athlete/year \* 762 athletes = 3,352.8 lbs/year
= 3,352.8 lbs/year \* \$0.15/lbs = \$502.92/year
= \$502.92/year \* 5 years = \$2,514.60/5 years

\*Opportunities to include staff and coaches (approximately 100) and sport fans

#### Recommendations

- Create a position for an athletics sustainability coordinator (work learn/ paid)
- TAC sustainability representative
- Host zero-waste game day events
- Purchase recyclable and lower-impact gear
- Purchase "sort it out" bins for all athletics facilities
- Pursue LEED certification for new gym and stadium

## THANK YOU!

CLOTHING AND SHOE

> CLOTHING AND SHOE

> > UBG

RECYCLING

ADVANCING SUSTAINABILITY IN SPORT

NHAT CAN

GO IN?

PAIRED