University Sustainability and Student Enrollments in the PNW

Toni Sipic, Central Washington University Neven Sipic, Zagreb School of Business

Introduction

- Growing student interest in environmental and social responsibility
- Universities are increasingly evaluated on sustainability efforts
- AASHE STARS provides a standardized rating system across institutions
- This study examines whether higher STARS scores impact admissions and enrollments
- Insights could inform university strategy, marketing, and sustainability investments

University Sustainability Ratings

- The Sustainability Tracking, Assessment & Rating System (STARS) is a comprehensive, transparent framework developed by the Association for the Advancement of Sustainability in Higher Education (AASHE).
- It is used by colleges and universities to measure and report their sustainability performance.
- Voluntary, self-reporting system
- Covers a broad range of sustainability metrics: academics, operations, planning, engagement, and innovation
- Institutions are rated as Bronze, Silver, Gold, or Platinum
- Facilitates benchmarking and encourages continuous improvement
- STARS scores reflect how well an institution integrates sustainability into campus culture, curriculum, and operations.



STARS 2.2

REPORT PREFACE

INTRODUCTION

PRE-1: Executive Letter

PRE-2: Points of Distinction

INSTITUTIONAL CHARACTERISTICS

PRE-3: Institutional Boundary

PRE-4: Operational Characteristics

Central Washington University Ellensburg, WA, US

Rating	Score	Valid Through	Liaison	Submitted
Silver	55.77	Sept. 15, 2025	Susan Kaspari	July 16, 2022

Introduction +	
Institutional Characteristics +	
Academics	
Curriculum +	28.48 / 40.00
Research +	12.95 / 18.00
Ingagement	
Campus Engagement +	8.70 / 21.00
Public Engagement +	7.03 / 20.00

Characteristics PRE-5: Academics and Demographics **ACADEMICS CURRICULUM** AC-1: Academic Courses AC-2: Learning Outcomes AC-3: Undergraduate Program AC-4: Graduate Program AC-5: Immersive Experience AC-6: Sustainability Literacy Assessment AC-7: Incentives for **Developing Courses** AC-8: Campus as a Living Laboratory RESEARCH AC-9: Research and Scholarship AC-10: Support for Sustainability Research AC-11: Open Access to Research

+	4.80 / 11.00			
	2.50 / 8.00			
	3.75 / 10.00			
+	2.24 / 8.00			
	2.00 / 3.00			
	3.20 / 6.00			
n+	3.45 / 7.00			
	4.84 / 10.00			
	3.27 / 7.00			
ninistration				
& Planning +	5.75 / 9.00			
fordability +	7.51/10.00			
Finance +	3.08 / 6.00			
Vork +	2.01 / 7.00			
adership				
adership	onus Points Earned: 3.25			

ENGAGEMENT

Why Students Care About Campus Sustainability

- Reflects Personal Values: Many students seek institutions that align with their environmental and social responsibility values, viewing sustainability as integral to their identity and future aspirations.
- Enhances Career Prospects: Universities with strong sustainability programs often provide better opportunities for students interested in green careers and responsible business practices.
- Peer Influence and Campus Culture: Active student-led sustainability initiatives, such as Green Offices, foster a culture that attracts like-minded individuals.
- Institutional Reputation: High sustainability ratings can enhance a university's reputation, making it more appealing to environmentally conscious students.

Literature

- Minutolo, Ivanova & Cong in Sustainability Accounting, Management and Policy Journal, 2021.
- Hickman & Meyer in The BE Journal of Economic Analysis & Policy, 2016.

Data

- Integrated Postsecondary Education Data System (IPEDS) from the National Center for Education Statistics (NCES).
 - For Dependent Variables: university admissions, university enrollments, and number of majors in natural resources.
- Association for the Advancement of Sustainability in Higher Education (AASHE) Sustainability Tracking, Assessment & Rating System (STARS)
 - For university sustainability rating

Data

Variable	Mean	Std. dev.	Min	Max
USA				
Admissions	8257.626	7350.596	24	72880
Enrollments (Fall)	15620.54	14200.54	102	73378
Natural Resources Majors	43.53259	72.30986	0	653
AASHE STARS Score	53.53922	16.89457	0	88.14
PNW				
Admissions	7469.817	6040.855	1275	23592
Enrollments (Fall)	15609.99	12808.34	1475	47400
Natural Resources Majors	86.65854	116.8672	0	443
AASHE STARS Score	56.55772	14.91363	0	77.43

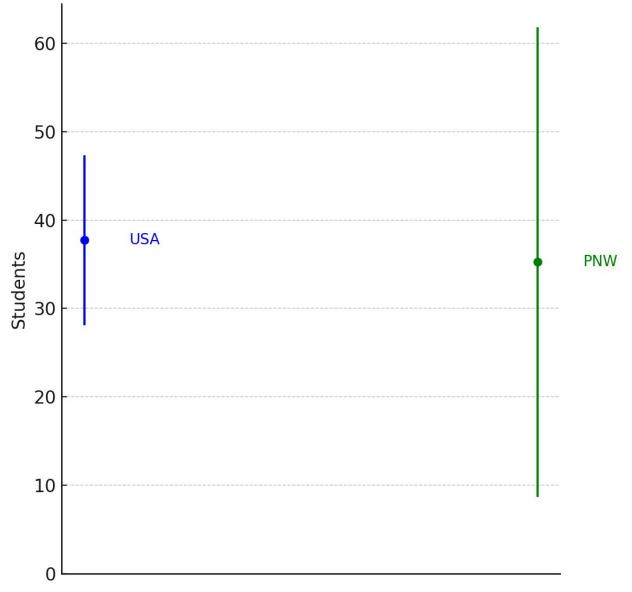
Model

$$Y_{it} = \beta_1 AASHE STARS Score_{it} + \varepsilon_{it}$$

- University i, year t
- Where Y contains dependent variables: university admissions, university enrollments, and number of majors in natural resources.
- • ε_{it} is the error term

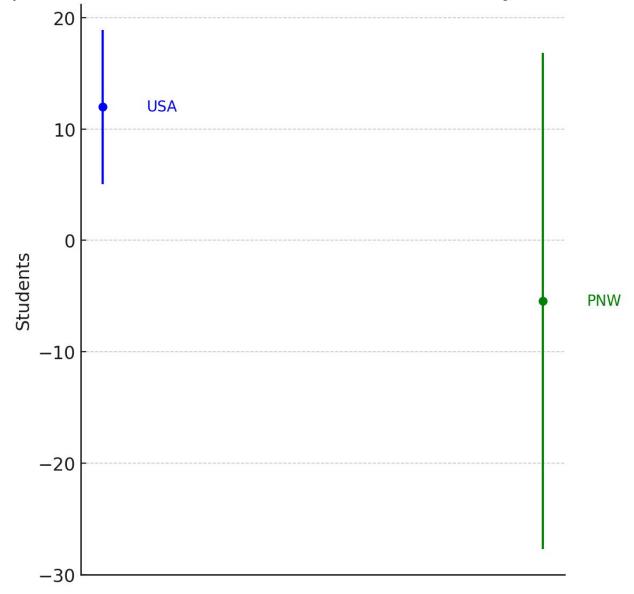
Impact of AASHE STARS Scores on University Admissions

Results



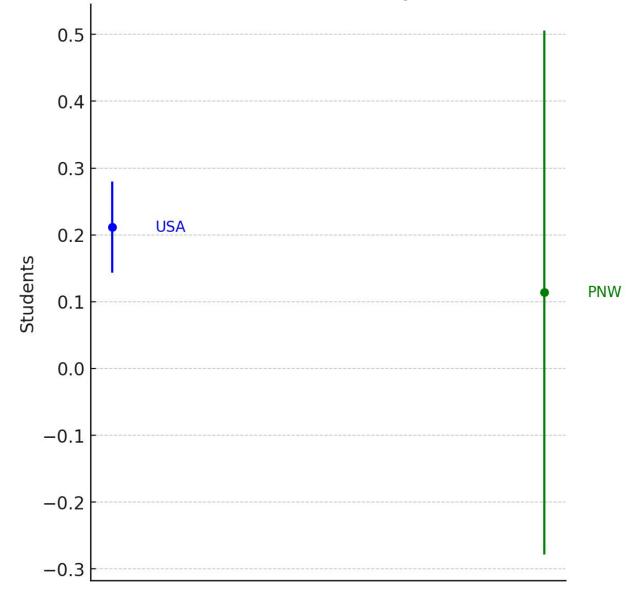
Impact of AASHE STARS Scores on University Enrollments

Results



Impact of AASHE STARS Scores on Majors in Natural Resources

Results



Future research

- Model selection
 - Propensity Score Matching
 - Instrumental Variables Approach
 - Instrument: AASHE annual conferences
 - International universities
 - Sub-scores
 - Finance
 - Carbon emissions