

Purchasing for a Sustainable Future:



Abstract

ASU's Sustainable Purchasing Research Initiative, SPRI, is an international initiative involving scholars, students, governments, and community leaders who are expanding capacity and knowledge to address sustainable purchasing challenges. Purchasing is typically overlooked as a climate solution. However, **92% of an organization's total climate emissions are attributable to procurement decisions** (CDP, 2021) and these emissions account for **40% of all global climate emissions** (Labutong & Hoen, 2018).

SPRI's goals are to:

1. Produce leading actionable research and knowledge about sustainable purchasing
2. Apply rigorous assessment tools to determine the ways in which organizations can advance sustainable purchasing more successfully
3. Partner with organizations seeking to advance sustainable purchasing

Through a cross-university collaboration between ASU's School of Sustainability, Thunderbird School of Global Management, the School for the Future for Innovation in Society, the School of Public Affairs, W.P. Carey School of Business, and faculty in various other ASU units, we focus on sustainable purchasing solutions that address the future of procurement, innovative collaborations, and organizational change. We also engage with international research partners to understand the facilitators and barriers of sustainable purchasing across numerous institutional settings globally. This robust group of [ASU Affiliates](#), [Global Research Fellows/Affiliates](#), and [ASU students](#) support SPRI's [mission](#).

40% of global climate emissions are related to procurement decisions.

By making more sustainable supply chain decisions, the [World Economic Forum](#) estimates that organizations can see substantial benefit:



13% - 22%

Reduction in carbon emissions



20% - 50%

Less energy needed



20% - 40%

Less water needed in production



60%

Reduction in landfill waste

Development

Need & Opportunity

SPRI's work has real world application and is of global importance. **Government purchasing accounts for about 1 in every 4 dollars (24%) in the U.S. economy and nearly 1 in 5 globally.** These purchases have an estimated environmental impact nine times greater than the impacts associated with managing public sector buildings and fleets. Within the supply chain, these impacts are approximately 5.5 times greater than those associated with governments' direct operations. Private sector purchasing involves similar sustainability impacts and accounts for about 18% of global GDP. The vast majority of an organization's emissions are within its purchasing (Scope 3) with **~92% of climate impacts due to procurement decisions.**



Sustainable purchasing (SP) introduces environmental and social criteria into purchasing decisions. By leveraging its enormous purchasing power, governments and businesses that adopt **sustainable purchasing can deliver goods and services while providing significant sustainability benefits.** Sustainable purchasing also has the ability to shape supply chains, incentivizing companies to reduce their emissions, and radically expand their global production of sustainable products and services. For these reasons, the Biden administration is promoting sustainable purchasing in numerous Executive Orders, including EO14030, which “requires agencies to consider a supplier’s greenhouse gas emissions when making procurement decisions and to give preference to bids from companies with lower greenhouse gas emissions.” The Biden administration also proposed a new rule requiring all Federal contractors to disclose their climate emissions so this information can be used to inform government contracting and purchasing decisions. At the local level, more than 1,000 U.S. local governments have pledged their commitment to meet the Paris Climate goals and about half are using sustainable purchasing to fulfill their climate commitments.

At a global level, international organizations such as the United Nations, the World Bank, USAID, and OECD are actively promoting sustainable purchasing. These factors are radically reshaping the purchasing landscape and will transform existing organizational policies and structures, workforce routines and training, and digital technologies.

While the United Nations (UNEP, 2022) and other **international governance bodies recognize SP as a critical climate solution**, it is often ignored due to its complexity. Most governments and businesses globally have not adopted SP. Those that have often struggle to achieve success. **Transforming procurement is crucial to achieve equitable climate solutions** through empowering **climate resilient communities**, promoting **supply chain justice**, and fostering **equitable climate resilient** marketplaces (Behraves, Darnall, et al., 2023; Hafsa, Darnall, et al., 2021).

SPRI is leveraging its research and collaborations by addressing hurdles related to the lack of understanding about the adoption process, complexities related to the implementation and institutionalization of sustainable purchasing programs, and the underutilization of procurement technology. We engage with digital technology developers to think creatively about how organizations can embed sustainability criteria in their purchasing decisions. Addressing this issue is important because existing technologies either have a sustainability focus, but little connection to purchasing, or a strong purchasing focus, but little connection to sustainability.

History

SPRI was founded in 2017 in ASU's School of Public Affairs' Center for Organizational Research and Design. Now housed in the School of Sustainability, SPRI's research team includes faculty from the School of Sustainability, School of Public Affairs, Thunderbird, School for the Future of Innovation in Society, & W.P. Carey, as well as a suite of global affiliates, students, and partners who continue to advance our knowledge about sustainable purchasing globally. In the past year alone, SPRI researchers have received a [National Science Foundation \(NSF\) award](#); our co-founder and director has been appointed to the U.S. General Services Administration's (GSA) [inaugural Acquisition Policy Federal Advisory Committee](#); and SPRI was the lead institution that produced the United Nations Environment Programme's [2022 Global Review on Sustainable Public Procurement](#).

Inspiration

These efforts, along with our contributions to the field demonstrate that SPRI is leading the way in research while engaging partners to improve sustainability outcomes globally. We do so by integrating perspectives related to sustainability, management, public management, supply chain, organizational change across research and practice. Our transdisciplinary approach amplifies our impact to relevant stakeholders.

Partnerships

1. **ASU Research Collaborators:** SPRI faculty are from **5** ASU academic units within **4** colleges.
2. **Global Research Collaborators:** SPRI coordinates **21** international University Research Fellows in **10** countries (Australia, Canada, Czech Republic, Italy, Japan, Mexico, Spain, Slovenia, Republic of Korea, and the U.S.), who have contributed data on **4,500** local governments' SP activities to a shared database. These data are the basis for our research that is engaging public procurement practitioners within each participating country.
3. **ASU Practitioner Partners:** SPRI has partnered with ASU's University Sustainability Practices and Staff Council on Sustainability to assess the barriers/facilitators of SP at ASU. SPRI identified critical gaps in staff knowledge and recommended university-wide SP training. Starting 2022, USP began offering sustainable purchasing training across the ASU community.
4. **Regional Practitioner Partners:** SPRI has collaborated with the cities of Tempe, Phoenix, Scottsdale, and Glendale (Glendale was in partnership with ASU's Project Cities) to help them advance SP. The City of Tempe utilized [ASU student recommendations](#) to build a sustainable purchasing policy passed by City Council in 2020. City of Phoenix relied on SPRI recommendations to expand its SP to include social concerns. City of Glendale partnered with SPRI to learn how it could rely on SP to help achieve its climate action goals.

SPRI Informs City of Phoenix on Green Purchases

SPRI conducted focus group interviews with City of Phoenix procurement specialists to identify the obstacles that had stalled the plan to implement the city's Environmental Procurement Policy. They found that there were organizational barriers in how purchasing is managed across city departments and trade-offs between purchasing criteria that compete with more eco-friendly options.



In light of this, the researchers provided eight recommendations to the city that ranged from the creation of an Environmental Procurement Policy team to the establishment of city level incentives to promote green purchasing. **According to Joe Giudice, the city's environmental programs manager**, the feedback was used to *"improve the city's sustainable purchasing program and advance the city's 2050 environmental sustainability goals."*

“Your students did an amazing job of creating recommendations that are appropriate for the City of Tempe’s current political and administrative circumstances. [SPRI] is a great example of the type of collaboration between [ASU] and the City of Tempe that can foster learning in both organizations and produce tangible policy outcomes.”

Braden Kay, Sustainability and Resilience Director, City of Tempe

5. **U.S. Practitioner Partners:** SPRI is working with the U.S. GSA, where the SPRI Director serves as an official member of its Federal Advisory Committee helping the agency to embed sustainability in its federal procurement processes. At the **state-level**, SPRI has partnered with [Utah](#) and New Mexico to advise on how to implement SP. In the case of New Mexico, ASU students offered recommendations to the state’s Chief Purchasing Officer (CPO) about how to introduce SP state-wide. These recommendations were presented to Secretary Ken Ortiz and later shared with New Mexico’s Governor.

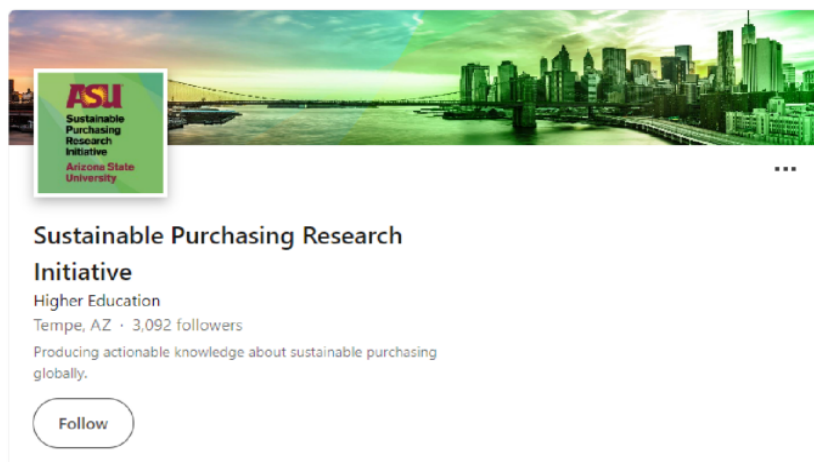
“Your students offer a stellar example of how a state might introduce a sustainable procurement program, and how using Arizona State University’s brain power as a resource [is] a windfall to New Mexico.”

Mark Hayden, Chief Purchasing Officer (CPO), State of New Mexico

6. **International Practitioner Partners:** SPRI is the lead research organization that authored the United Nations 2022 Global Review in Sustainable Public Procurement, which [presented to more than 700 registrants representing more than 90 countries](#).
7. **Engagement:** Our partnerships, [public reports](#), academic publications, [webinars](#), presentations, [blogs](#), and [social media engagement](#) assist practitioners to develop successful SP programs.

“What a great action plan you just gave us!” “This research is so helpful at identifying the drivers and obstacles to SP adoption and success. Thanks for the great work.”

[LinkedIn](#) stakeholders



8. **Student Mentorship:** All SPRI activities integrate ASU students at all levels, who help strategize solutions and co-author SPRI publications. Several of these students have received ASU awards for their work with SPRI, including [Watts College's Doctoral Research Symposium Best Paper Award](#), Outstanding Sustainability Student, Sustainability Undergraduate Research Experience Student of the Year, and [Outstanding Sustainability Undergraduate Student](#), and the Rob Melnick Scholarship (which enabled one student to travel overseas to learn about SP in Europe).

"[Working with SPRI] was a wonderful experience...and led to my first publication and a deep dive into research, analysis and synthesis in a way [that] I hadn't experienced before. It was exciting to take my prior experiences and apply them to different scopes of study. Thank you...for the opportunity to learn, contribute, and create."

[Jake Swanson](#), Graduate Student at ASU's School of Sustainability

*"SPRI has helped me to appreciate research methods and their **ability to create important impacts**. I have used what I learned in many other courses and positions. I also gained a network of like minded people who care about advancing sustainable procurement."*

[Anna Elovitz](#), ASU Undergraduate Student



Purpose, Goals, and Objectives

SPRI's goals are to: (1) produce leading actionable research and knowledge about sustainable purchasing; (2) apply rigorous assessment tools to determine the ways in which organizations can advance sustainable purchasing more successfully; and (3) partner with organizations seeking to advance sustainable purchasing.

During our first strategic planning meeting the beginning of 2019, we hoped to accomplish the following in the next 5 years:

1. Become the premiere organization for sustainable purchasing research
2. Be identified as the authority in sustainable purchasing
3. Produce a significant amount of research
4. Influence the research community through citations, journal articles, and other media outlets
5. Influence the community of practice including program managers and policy makers
6. Improve sustainability outcomes at the organization level

All of these have been accomplished and continue to guide our work. We revisited these goals Fall of 2022 and identified a few additional goals to further set SPRI up for success. Going forward, we plan to:

1. **Formalize SPRI's internal processes to increase our organizational impact.** This includes vetting engagement and collaboration opportunities as well as increasing our student engagement and social media/web presence.
2. **Enhance SPRI's visibility and impact with practitioners and within academia.** We are striving to have at least three high-impact papers published in the next 5 years. We are also working towards formalizing a process to engage more with the private sector through additional events and conferences.
3. **Enhance SPRI's internal capacity around procurement** through our NSF grant focusing on technology and taking advantage of additional webinars and conferences.

In all that we do, SPRI operates according to five core values:

1. **Results** – We produce work that leads to better decisions.
2. **Rigor** – We adhere to the highest scientific and professional standards.
3. **Relevance** – We are embedded within the community of practice.
4. **Accessibility** – We publicize our findings widely and make them applicable to multiple audiences.
5. **Independence** – We are a nonadvocacy organization.

Target Population

SPRI's target populations include any organization or individual that is interested in sustainability and especially those that are primed and committed to growing their knowledge around sustainable purchasing. We cast a wide net and work with municipalities, states, federal government organizations, NGOs, universities, researchers, and the private sector. SPRI collaborates with any organization or individual with the desire to collaborate on the advancement of sustainable purchasing in action.

Collaborative Planning & Implementation

SPRI works with ASU faculty and students, researchers all around the world, practitioners, municipalities, and more to work towards our goals.

Global Research Network

At the beginning of 2022, SPRI introduced an inaugural cohort of Global Research Affiliates. Members of the leadership team nominated each of the four affiliates to collaborate with SPRI to support our mission of producing actionable knowledge on sustainable purchasing globally.

This group of scholars:

1. Actively pursue research related to sustainability and purchasing/procurement;
2. Have interests in sharing their research learning with SPRI and its community;
3. Are open to research collaborations with SPRI and its community.
4. By expanding SPRI's global footprint, we not only foster foundational social science research but also create a broader and stronger network for researchers working in the space.

The group includes [Marta Andhov](#) from the University of Copenhagen, [Ana-Maria Dimand](#) from Boise State University, [Michal Plaček](#) from Charles University and Ambis College, and [Steven Schooner](#) from George Washington University Law School. SPRI has already begun working with these Global Research Affiliates on developing new research.

*“The Sustainable Purchasing Research Initiative...**played a pivotal role in shaping my dissertation**, and its impact continues to influence my work to this day. As a Global Research Affiliate, it gives me great pride to work alongside this esteemed team to advance research on sustainable public procurement. I am excited for our continued collaboration and **confident that our joint efforts will make significant contributions to the field.**”*

Ana-Maria Dimand, Assistant Professor, Boise State University

*“SPRI has opened up new dimensions of sustainability research for me. I have to appreciate the **well-crafted materials** such as survey research protocols as well as the opportunity to discuss research problems. The **networking support** provided by SPRI is also important for early career researchers.”*

Michal Plaček, Associate Professor at Charles University and Ambis College (Prague)

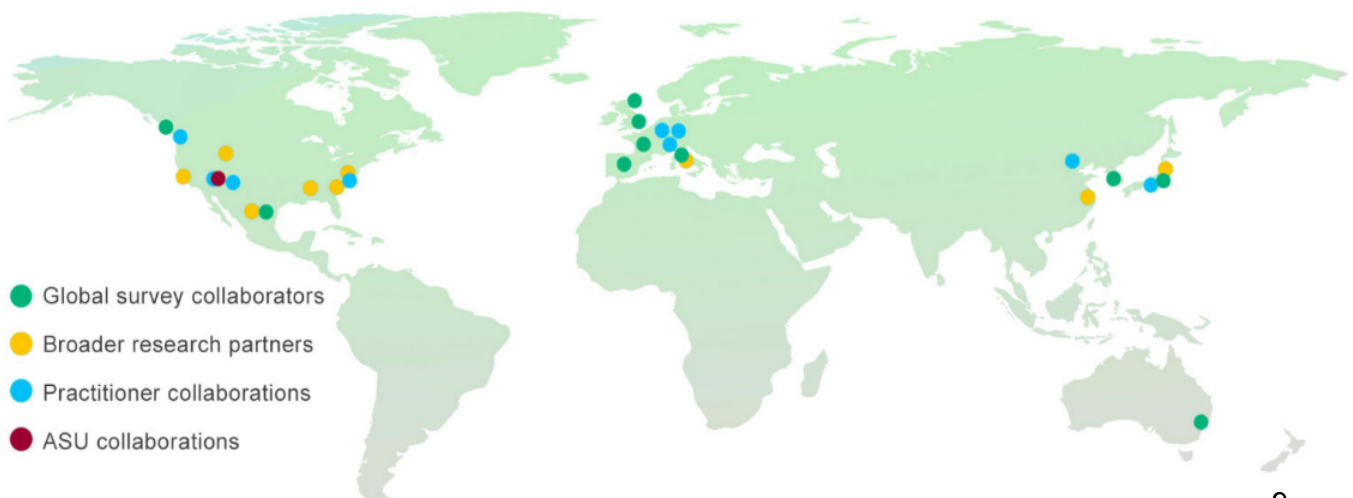


Global Research Network

1. Boise State University
2. Charles University and Ambis College
3. ESAN Graduate School of Business
4. George Washington University Law School
5. Kedge School of Business
6. Korea University
7. Sant'Anna School of Advanced Studies
8. Shanghai Jiao Tong University
9. Shanghai University of Finance and Economics
10. Tecnológico de Monterrey, EGADE Business School
11. Tohoku Gakuin University
12. Universidad de Monterrey
13. University of Alabama
14. University of Bath School of Management
15. University of Copenhagen
16. University of Granada, School of Economics and Business Organization
17. University of Leeds
18. University of New South Wales
19. University of the Basque Country UPV/EHU
20. University of Victoria, Peter B. Gustavson School of Business
21. UNSW School of Business
22. Wageningen University and Research
23. Waseda University, Research Institute for Environmental Economics and Management

SPRI provides “**robust evidence** concerning how different...organizations are either adopting sustainability principles or transitioning to sustainable procurement principles or both. In addition, **the data collected is instrumental in terms of improving decision-making processes** related to both public policy design and public policy implementation seeking waste reduction and environmental degradation.”

[Sandor Lukacs de Pereny](#), ESAN Graduate School Of Business, Lima, Peru



ASU Faculty Participants and Collaborations

Leadership	<u>Nicole Darnall</u> Director and Co-founder, Sustainable Purchasing Research Initiative
	<u>Shirley-Ann Augustin-Behravesh</u> Associate Director, Sustainable Purchasing Research Initiative
ASU Faculty Affiliates	<u>George Basile</u> Professor of Practice, School of Sustainability, College of Global Futures
	<u>Stuart Bretschneider</u> Emeritus Foundation Professor, Watts College of Public Service & Community Solutions
	<u>Kevin Dooley</u> Chief Research Scientist, The Sustainability Consortium, Global Institute of Sustainability and Innovation
	<u>Lily Hsueh</u> Associate Professor, School of Public Affairs, Watts College of Public Service and Community Solutions
	<u>Thomas Kull</u> Professor, Department of Supply Chain Management, W.P. Carey School of Business
	<u>Eusebio Scornavacca</u> Professor of Innovation Policy, School for the Future of Innovation in Society, College of Global Futures
	<u>Justin Stritch</u> Associate Professor, School of Public Affairs, Watts College of Public Service & Community Solutions
	<u>Veronica Villena</u> Associate Professor, Supply Chain Management, W.P. Carey School of Business
	<u>Eric Welch</u> Director, Center for Science, Technology and Environment Policy Studies
ASU Collaborations	<ol style="list-style-type: none"> 1. Global Institute of Sustainability and Innovation 2. School for the Future of Innovation in Society 3. School of Sustainability 4. Thunderbird School of Global Management 5. University Staff Council 6. University Sustainability Practices 7. Watts College of Public Service and Community Solutions, School of Public Affairs 8. W.P. Carey School of Business, Department of Supply Chain Management

ASU's Sustainable Consumption and Purchasing Workshop

Sustainable consumption and purchasing reduce negative environmental effects and advance social equity. ASU's first Sustainable Consumption and Purchasing Workshop in 2019 brought together researchers and faculty from a variety of disciplines to share insights, learn from others, and explore pathways that leverage collective knowledge on this topic.



*“...Initiatives like SPRI are important to **create actionable research to inform world leaders' thinking** and pave the forward through small, but concrete steps.”*

Fatima Hafsa, Postdoctoral Scholar, W.P. Carey School of Business

Practitioner Collaborations and Networks

Practitioner Collaborations and Networks

1. City of Glendale
2. City of Phoenix
3. City of Scottsdale
4. City of Tempe
5. Ecolabel Index
6. European Union Green Public Procurement Advisory Group
7. ICLEI – Local Governments for Sustainability
8. ICMA – International City/County Management Association
9. International Green Purchasing Network
10. International Forum on Sustainable Value Chains
11. Japan Environment Association
12. Japan Green Purchasing Network
13. Japan Ministry of Environment
14. New America, Public Interest Technology University Network
15. Responsible Purchasing Network
16. State of New Mexico
17. State of Utah
18. Sustainable Cities Institute – National League of Cities
19. Sustainable Cities Network
20. Sustainable Purchasing Leadership Council
21. ThinkFour
22. U.S. Environmental Protection Agency
23. U.S. General Services Administration
24. United Nations Environment Programme (UNEP)

Facilitating Green Purchasing in Japan

For almost 20 years, the Ministry of the Environment in Japan has tried to get local municipalities to adopt green purchasing policies (GPP) to mixed results. In 2018, SPRI collaborated with [Waseda University's Research Institute for Environmental Economics and Management \(RIEEM\)](#) to determine why.

More than 800 Japanese municipalities represented by finance, municipal engineering, and environmental directors were surveyed. The survey revealed that just over 50% of directors reported that their municipality had implemented a GPP and more than a third of those directors said that the implementation had failed, revealing significant organizational barriers concerning implementation.

In a bid to address this, RIEEM hosted a [multi-stakeholder meeting](#) in December 2018 to discuss the challenges and possible solutions to advancing eco-friendly purchasing in Japanese municipalities. The participants ranged from government representatives to academic researchers from 16 different organizations. They concluded that there were three possible pathways to advancing GPP in Japanese municipalities: Increasing organizational commitment, enhancing knowledge and information access, and expanding organizational capacity. In the end, RIEEM and SPRI reaffirmed their commitments to assist by offering solutions that will advance GPP in Japanese municipalities.



Sustainable Purchasing Leadership Council (SPLC) presents SPRI with Outstanding Case Award

Members of SPRI won the [Sustainable Purchasing Leadership Council's \(SPLC\)](#) Outstanding Case Award for their case study "[Environmental Purchasing in the City of Phoenix](#)."

The case study by [Nicole Darnall](#), co-founder of SPRI, [Lily Hsueh](#), [Justin Stritch](#), and [Stuart Bretschneider](#) pinpoints both the facilitators and challenges of implementing an environmental purchasing policy (EPP) at a municipal level. It also offers eight recommendations for how cities like Phoenix can integrate an EPP more fully into their existing purchasing processes.

Not only did SPRI collaborate with and support City of Phoenix's sustainable purchasing goals, but this case study highlights the caliber of work that SPRI produces. We are so thankful to be celebrated by our practitioner partners.



*"As a pioneer in sustainable procurement support, best practice development and dissemination, and leadership recognition, the Sustainable Purchasing Leadership Council has benefited from an ongoing relationship with SPRI. We are practitioner-focused, delivering coaching and support to hundreds of diverse members from different sectors. While we of course derive insight from our ongoing contact with procurement practitioners, **SPRI expands and validates that practical knowledge with highly relevant research insights** into what conditions, tools and learning are most supportive for sustainable procurement practitioners. We are always happy to collaborate with SPRI and learn from its work."*

Sarah O'Brien, CEO, Sustainable Purchasing Leadership Council

*"The **Sustainable Purchasing Research Initiative's student teams have been invaluable** in enabling our 501c3 organization to effectively serve institutional members with up-to-date sustainable procurement guidance and resources, providing them with practical ways to engage their purchasing systems, suppliers, end users and other stakeholders.*

*Partnering with the Sustainable Purchasing Research Initiative on collaborative efforts around sustainable purchasing measurement has **activated potential opportunities** that our 501c3 would not otherwise have had access to, while **deepening the credibility of our work and expanding our ability to scale our mission.**"*

Kris Spriano, Director of Technical Programs, Sustainable Purchasing Leadership Council

Outcomes & Impacts

Four of the primary groups that we engage with are: communities/municipalities, research partners, ASU students, and practitioner partners. The below outlines the impacts that SPRI has had on the various groups.

	Research partners	Student engagement	Practitioner partners
Assist in raising funds through grants	✓	✓	✓
Co-educate students	✓		✓
Co-investigator	✓		
Evaluate or provide feedback on students' work	✓		✓
Identify areas of need	✓	✓	✓
Identify expected measures, benefits, or outcomes	✓	✓	✓
Manage the program/project	✓		
Measure the impact of the project/program on the community	✓	✓	✓
Promote program/ project to target populations	✓	✓	✓
Co-creating data	✓	✓	✓
Provide access to target populations	✓		✓
Set goals	✓	✓	✓
Supervise the program	✓		
Supervise students	✓	✓	✓

Program Outputs and Outcomes

We use a mixture of quantitative and qualitative to measure SPRI's impact and our outputs. This includes follow up questionnaires to our community partners, reviewing social media impacts and website traffic, measuring our collaboration base, and more.

<p>Awards & Recognition</p> <ul style="list-style-type: none"> • SPRI's Director appointed to the U.S. GSA Federal Advisory Committee tasked with embedding climate and sustainability considerations into Federal acquisition • SPRI's City of Phoenix case study received the Sustainable Purchasing Leadership Council's "2019 Best Case Award" • Academic manuscripts recognized as best papers in international conferences 	5
<p>Campus Representation University Staff Council Sustainable Purchasing Subcommittee</p>	✓
<p>Communal Database Australia, Italy, Japan, Mexico, Spain, Republic of Korea, and the U.S.</p>	~4,500 cities
<p>Consultations</p> <ul style="list-style-type: none"> • International - United Nations Environment Programme • National - U.S. General Services Administration • State - State of Utah, State of New Mexico • Local - Cities of Glendale, Phoenix, Tempe, Scottsdale 	8
<p>Expert testimony U.S. General Services Administration Federal Advisory Committee</p>	✓
<p>Funded grant proposals</p> <ul style="list-style-type: none"> • United Nations • National Science Foundation • Social Science Research Council • VK Rasmussen Foundation • Global Consortium for Sustainability Outcomes 	5
<p>Invited academic speeches and presentations Social Science Research Council, Group for Research on Organizations and the Natural Environment, Production and Operations Management Society, Transatlantic Roundtable on Sustainable Public Procurement, Waseda Institute of Political Economy, University of Washington Center for Environmental Politics, Waseda University Research Institute for Environmental Economics and Management, Kyoto University Graduate School of Economics, Kobe University Department of Economics, Future Earth/Research Institute for Humanity and Nature Kyoto University, University of Queensland School of Business, Macquarie University School of Business, Nanyang Technical University Center for Business Sustainability, George Washington University School of Business</p>	14

<p>Invited capacity-building presentations and workshops</p> <p>United Nations Environment Programme, American Public Works Association, City of Scottsdale (Environmental Advisory Commission), City of Phoenix (Department of Environmental Programs), State of Utah Sustainability Summit, Ministry of Environment Japan, Greenhealth Exchange, New America, Transatlantic Roundtable on Sustainable Public Procurement, U.S. General Services Administration Federal Advisory Committee, EcoPro, ASU Staff Council Sustainable Purchasing Subcommittee, ASU Staff Council Sustainability Committee, Alliance for Innovation</p>	<p>20</p>
<p>Lifelong learning</p> <p>Developed 5 ThinkFour videos – to provide an open-access learning platform about sustainable purchasing that is accessible to people of all ages</p>	<p>✓</p>
<p>Policy</p> <p>City of Tempe Sustainable Procurement Policy; GSA Federal Advisory Committee</p>	<p>✓</p>
<p>Practitioner collaborations</p>	<p>24</p>
<p>Presentations – 10 invited presentations, 10 conferences</p>	<p>20</p>
<p>Publications – 12 with 7 more in queue</p>	<p>19</p>
<p>Public reports</p> <p>Advancing Sustainable Public Purchasing in Australia, Italy, Japan, Mexico, Spain, Republic of Korea, and the U.S. The Mexico and Italy reports were translated into Spanish and Italian. Other report was published by the United Nations: 2022 Global Review of Sustainable Public Procurement</p>	<p>10</p>
<p>Public scholarship</p> <p><i>Cities Speak, Purchasing Professional, LSE Business Review, Public Management Magazine, ICMA Blog, Policy Forum</i></p>	<p>10</p>
<p>Social media impacts</p> <p>SPRI's LinkedIn has more than 3,000 followers who are primarily practitioners; >1.3 million individuals have engaged with SPRI posts</p>	<p>✓</p>
<p>Student engagement</p> <p>65 total students; 22 students have worked directly on SPRI projects and 43 have connected with SPRI through classroom partnerships. Collectively, they invested hundreds of hours. Related to student diversity, 53% are people of color and 85% are women.</p>	<p>✓</p>
<p>Student showcase presentations</p> <p>City of Tempe, City of Phoenix, City of Glendale, and others as part of ASU's Sustainability Undergraduate Research Experience</p>	<p>7</p>
<p>Video tips</p> <p>YouTube</p>	<p>8</p>

State of Utah and City of Scottsdale Engagement with SPRI

In March 2022, SPRI faculty presented at the Utah Sustainable Purchasing Summit hosted by Utah Resource Stewardship. The State of Utah is seeking to amplify its focus on sustainable purchasing and invited SPRI to discuss different approaches to its ~100 summit attendees.

SPRI faculty also presented to the City of Scottsdale Environmental Advisory Committee in May of this year to provide information about actionable sustainable purchasing practices. The City of Scottsdale is in the process of developing their first-ever sustainability plan and is considering how sustainable purchasing may help it achieve its sustainability goals.



*“[We are] currently developing a sustainable procurement program, and being new to the sphere of procurement, we have used SPRI as a guide to understanding current best practices. The research done through **SPRI has also shown us how large a role procurement plays in an organization** reaching its emission reduction goals.”*

Michelle Brown, Coordinator of Resource Stewardship, State of Utah

*“Through [my work with SPRI]..., I have developed expertise in research design and accumulated a pipeline of working papers, setting a strong foundation to advance my research agenda in the next three to five years. In short, **SPRI has had a tremendous impact on my research interests and the ways of thinking.**”*

[Yifan Chen](#), ASU Ph.D. Graduate and Assistant Professor at Shanghai Jiao Tong University

*“The expertise and work of SPRI are **valuable to the ongoing work and success of the sustainability procurement program at ASU.** We look forward to continued collaboration with SPRI.”*

[Danielle Van Vleet](#), ASU Assistant Director of Sustainability and Diversity Procurement

ASU's Design Aspirations & Sustainability Goals

ASU's Design Aspirations	
Leverage Our Place	SPRI has collaborated with the Cities of Glendale, Phoenix, Tempe, and Scottsdale . It is important for us to work with communities where we live and work.
Enable Student Success	SPRI has worked with a total of 65 students . 22 have worked directly on SPRI projects and 43 have connected with SPRI through classroom partnerships. We pride ourselves in the diversity of our students with 53% being people of color and 85% women .
Transform Society	3.3 to 3.6 billion people's daily lives are "highly vulnerable" to climate change (IPCC, 2023) and sustainable procurement is essential to reducing the impacts of climate change.
Fuse Intellectual Disciplines	SPRI works closely with 23 other universities and countless departments and disciplines including sustainability, business, public affairs, law, and more .
Value Entrepreneurship	SPRI engages digital technology start-ups (e.g., Persefoni, TermScout) about innovative ways to support the future of sustainable procurement using AI and other emerging technologies.
Be Socially Embedded	We partner with communities all over the world to learn from them and help them achieve more sustainable outcomes.
Conduct Use-Inspired Research	Producing actionable research and knowledge is at the crux of what SPRI does at the forefront of sustainable purchasing and organizational change.
Engage Globally	3 out of 4 of our Global Research Affiliates are from outside of the United States and we coordinate with 21 International University Research Fellows across 10 countries. We have also worked closely with UNEP and produced reports with teams from Australia, Italy, Japan, Mexico, South Korea, and Spain . Our work has produced a database including ~4,500 cities.
Practice Principled Innovation	Our core values drive SPRI's work and we adhere to rigorous scientific and professional standards . We also pride ourselves in remaining independent and do not act as an advocacy organization. SPRI focuses on being accessible and relevant by producing work that leads to better, more sustainable decisions .

ASU's Sustainability Goals and Vision

Circular Resource System	SP encourages buyers to consider circularity in purchasing decisions. This connection can be seen in ASU's sustainable purchasing policies .
Climate Positive	92% of an organization's emissions are connected to their procurement decisions (CDP, 2021). To reduce emissions and become net-positive, organizations need information about their Scope 3 emissions .
Collaborative Action	At ASU alone, SPRI works across 5 academic units within 4 different colleges.
Community Success	We strive to work with diverse students as well as focus on climate equity through our work as climate vulnerability is "exacerbated by inequity and marginalization" (IPCC, 2023).
Food Reconnection	Executive Order (EO) 13693 requires the purchase of "environmental preferable products" for all federal procurement. The federal government is heavily focusing on implementing this in their Food Service Guidelines for Federal Facilities paving the way for more sustainable food purchasing nationwide (U.S. Department of Health and Human Services, 2017).
Optimizing Water	With 40 states anticipating water shortages over the next few years (EPA, 2022), reducing water usage and encouraging responsible purchasing around water is essential.
Personal Action	SPRI has collaborated with 65 students and actively collaborates with 11 ASU faculty plus University Sustainability Practices, University Staff Council , and more.
Climate Resilience	Making more sustainable purchasing decisions, reduces climate risk and increases resilience. In addition to the research we produce, we recommended a university-wide sustainable purchasing training . As of 2022, USP offers one across ASU.

Community Impacts

Campus relationship(s) or partnership(s)	✓
Connection(s) to other community group(s)/network(s)	✓
Operation(s) (e.g., accounting, data systems, etc.)	✓
Insight(s) into partner organization program(s)	✓
Public recognition	✓
Resource capacity (e.g., volunteer, information, publication, etc.)	✓
Capacity to serve client(s)	✓
Service(s) to client(s)	✓

SPRI Partnership with ASU's Project Cities and the City of Glendale, AZ

In fall of 2018, Nicole Darnall, SPRI co-founder, led students in a collaboration with the City of Glendale through her SOS/PAF 545: Organizations, Sustainability & Public Policy course. The class was divided into four teams, each creating a professional report on the various strategies the city was focusing on to provide guidance for incorporating sustainability into its new Facilities Master Plan. These strategies ranged from sustainable landscaping and increased energy efficiency to health and well-being standards and waste prevention strategies, totaling nine potential topics the city was interested in pursuing. The students narrowed down the list under Darnall's guidance and one of the teams focused on sustainable purchasing.



The class took a field trip to the City of Glendale to meet with the city staff and visualize their proposals. Communication between the staff and the class was crucial for ensuring all needs were being met on both ends with the students' research. The students conducted literature reviews, identified relevant case studies, interviewed topic experts, and conducted a cost-benefit analysis of their various proposals. The project drafts were submitted to the city officials for review in November 2018, providing the students an opportunity to revise based on relevant feedback.

Through this course, SPRI and [Project Cities](#) provided students firsthand experience to apply their education in sustainability and policy in a professional environment to better help the City of Glendale develop a fresh perspective for addressing their municipal sustainability goals.

“SPRI had a huge impact on the City of Tempe's sustainable procurement program and is the main reason we now have a guiding Sustainable Procurement Policy. The Procurement Division lacked the knowledge and expertise to develop a Sustainable Procurement Program so in 2018/2019...through the ASU School of Sustainability...[SPRI]...help[ed] us establish a Sustainable Procurement Program. Over the course of about 16 weeks this group of students worked with our Procurement team on four specific projects: 1) Sustainable Procurement Policy, 2) Sustainability Questionnaire, 3) Office Supply Green Program, and 4) Custodial Green Program. The **students poured in their energy and research and provided excellent white papers** on each of these projects that allowed our Procurement team to implement the projects. We now have a strong Sustainable Procurement Policy that is continuing to guide our green purchasing efforts. We utilize a robust Sustainability Questionnaire that has been incorporated in all of our solicitations that encourages suppliers to share their accomplishments in sustainability actions. We also have strong office products and custodial green programs that are continuing to expand our green spend each year. **Through the knowledge and research that [SPRI's] graduate team provided, Tempe now has a robust sustainable procurement program that continues to thrive.”**

Michael Greene, Procurement Administrator, City of Tempe

Going Forward

SPRI's work continues. Our goal is to scale our reach and impact. This includes:

- Continuing to produce sustainability solution-inspired research
- Partnering with more ASU students, faculty, and staff
- Collaborating with community partners
- Creating impactful solutions for organizations to advance sustainable purchasing practices
- Maintaining our position as the premiere organization for sustainable purchasing research

Our next steps include further increasing our organizational impact and enhancing our visibility and impact within ASU and beyond. We will leverage our recent technology partners to expand our internal capacity around procurement technologies and support organizations' sustainable purchasing outcomes across the globe.

Sustainable Purchasing Research Initiative

Arizona State University

The Sustainable Purchasing Research Initiative produces actionable knowledge about sustainable purchasing globally.

SPRI is a cross-university collaboration between researchers in ASU's School of Sustainability, the School of Public Affairs, Thunderbird School of Global Management, W.P. Carey School of Business and faculty in other ASU units. Our research is at the forefront of issues affecting sustainable purchasing, including the future of procurement, innovative collaborations and organization change. We engage research partners internationally to understand the facilitators and barriers of sustainable purchasing across numerous institutional settings.

Our Mission is to produce actionable research knowledge about sustainable purchasing globally.

Our Core Values

1. Results
2. Rigor
3. Relevance
4. Accessibility
5. Independence

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