アリゾナ州立大学　Nicole Darnall 氏「アメリカの自治体における持続可能な公共調達と環境ラベル」

Sustainable Purchasing and Ecolabel Use in U.S. Local Governments

ASU Center for Organization Research and Design
Arizona State University
Sustainable Purchasing Research Initiative

安倍 ABE FELLOWSHIP PROGRAM
SSRC
WASEDA

About Me

Dr. Nicole Darnall
Professor
Management and Public Policy

ASU School of Public Affairs
Arizona State University

ASU School of Sustainability
Arizona State University

WASEDA
Visiting Scholar

安倍 ABE FELLOWSHIP PROGRAM
SSRC

ASU Center for Organization Research and Design
Arizona State University
Sustainable Purchasing Research Initiative

Two Parts…

1. **Results of a U.S. study on cities' SPPs**
2. **Results of international study on ecolabel design**

SPP: Sustainable Purchasing Policy

ASU Center for Organization Research and Design
Arizona State University
Sustainable Purchasing Research Initiative

Sustainable Purchasing at U.S. Federal and State Levels

- Federal level
  - Executive orders (3)
    - Sustainability = criteria within federal agencies' purchasing
  - Clinton administration
    - "Greening the Government Through Waste Prevention, Recycling and Federal Acquisition"
  - Obama administration - expansion
    - Reduce greenhouse gas emissions
    - Stimulate demand for sustainable products
  - No enforcement mechanism
  - Policy likely to change under Trump administration
- State Level – some states endorse it – California

ASU Center for Organization Research and Design
Arizona State University
Sustainable Purchasing Research Initiative

1. **Do U.S. cities that adopt a SPP differ from nonadopters?**
2. **What factors are associated with SPP implementation success?**

ASU Center for Organization Research and Design, Arizona State University
Sustainable Purchasing Research Initiative

U.S. Project Scope

- Sample of 791 U.S. cities of ≥25,000 residents
  - Representative based on location, size and income
- Surveyed department directors
  - Environment, finance and public works
- Focused specifically on environment
- Data collection completed April 2017
  - 58.0% cities (459)
  - 33.8% individuals (616)

ASU Center for Organization Research and Design, Arizona State University
Sustainable Purchasing Research Initiative

Project Faculty
Nicole Danall, Justin Stritch, Stuart Bretschneider, Lily Hsueh

Research Institute for Environmental Economics and Management

WASEDA

ABE FELLOWSHIP PROGRAM

SSRC

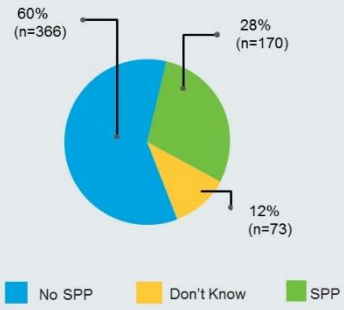
Japan Project Scope

- All 860 Japanese municipalities of ≥25,000 residents
- Surveying department directors
  - Environment, finance and public works
- Focusing specifically on environment
- Data collection will be completed January 2018
  - > 83.0% municipalities (714)
  - > 50.0% individuals (430)
- Return November 2018 – January 2019

ASU Center for Organization Research and Design, Arizona State University
Sustainable Purchasing Research Initiative

Project Faculty
Nicole Danall, Toshi Arimura, Takuro Miyomoto

U.S. SPP Adoption



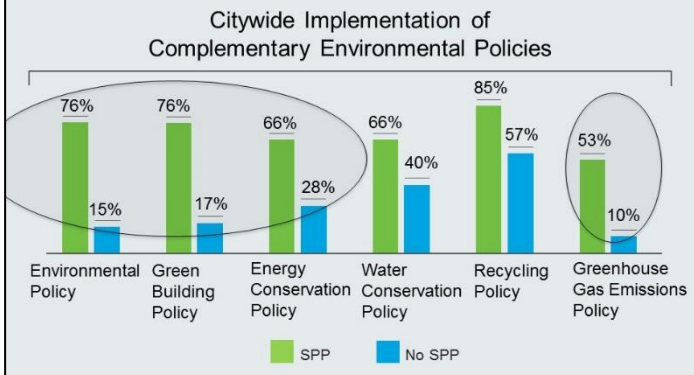
ASU Center for Organization Research and Design, Arizona State University — Sustainable Purchasing Research Initiative

1. Do U.S. cities that adopt a SPP differ from nonadopters?

A. Citywide complementary policies and practices
B. Information access
C. Leadership and resources
D. Vendor roles

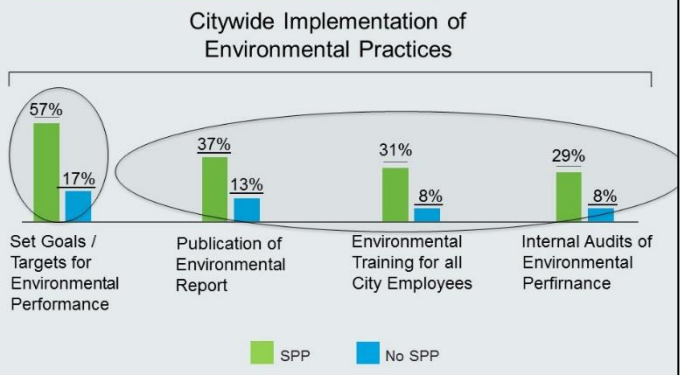
ASU Center for Organization Research and Design, Arizona State University — Sustainable Purchasing Research Initiative

A. Complementary Policies



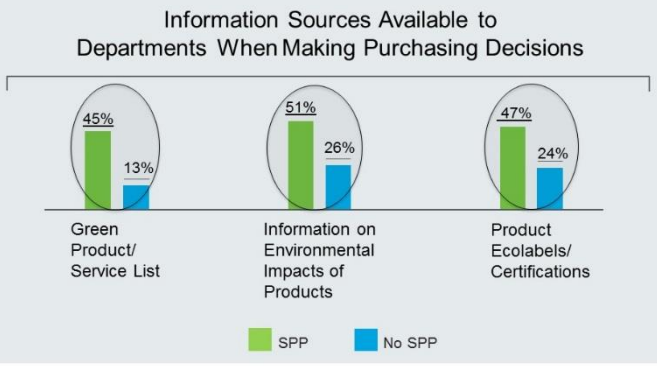
ASU Center for Organization Research and Design, Arizona State University — Sustainable Purchasing Research Initiative

A. Complementary Practices



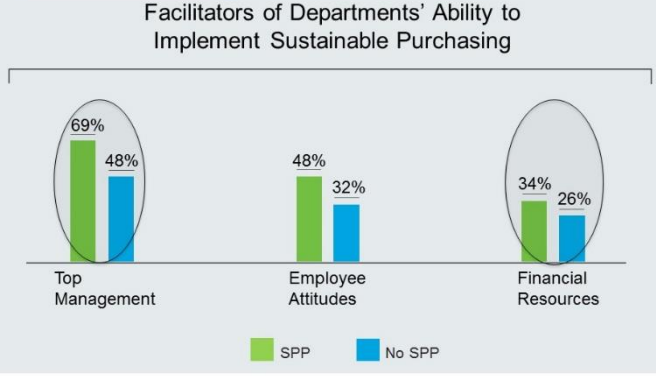
ASU Center for Organization Research and Design, Arizona State University — Sustainable Purchasing Research Initiative

B. Information Access



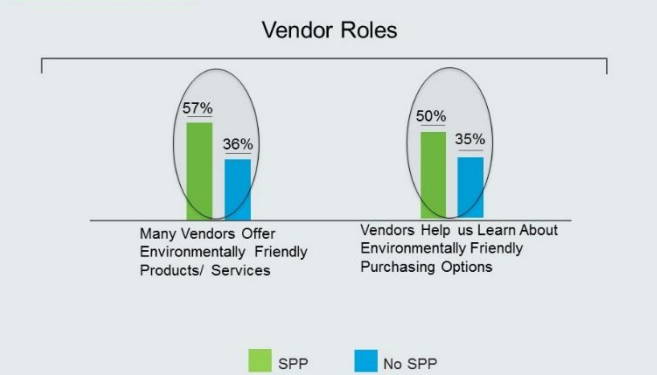
ASU Center for Organization Research and Design Arizona State University | Sustainable Purchasing Research Initiative

C. Leadership



ASU Center for Organization Research and Design Arizona State University | Sustainable Purchasing Research Initiative

D. Vendors

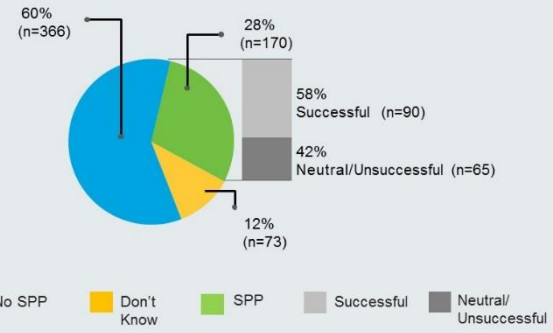


ASU Center for Organization Research and Design Arizona State University | Sustainable Purchasing Research Initiative

But adopting a SPP does not mean that it will be successful at reducing environmental impacts…

ASU Center for Organization Research and Design Arizona State University | Sustainable Purchasing Research Initiative

U.S. SPP Implementation Success



ASU Center for Organization Research and Design, Arizona State University — Sustainable Purchasing Research Initiative

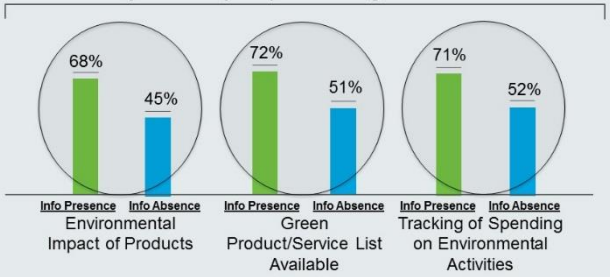
2. What Factors Are Associated With U.S. Cities' Sustainable Purchasing Success?

A. Citywide complementary policies and practices
B. Information access
C. Leadership and resources
D. Collaborative relationships with vendors
E. Innovation culture

ASU Center for Organization Research and Design, Arizona State University — Sustainable Purchasing Research Initiative

Information Access

Given Access to Types of Information, Probability of a City Implementing a Successful SPP



ASU Center for Organization Research and Design, Arizona State University — Sustainable Purchasing Research Initiative

Recommendations for Cities to Increase SPP Adoption and Implentation Success

Our 8 Recommendations

1. Build on complementary policies and practices
2. ***Use information about environmentally preferred products***
3. Utilize e-procurement systems that integrate environmental product information
4. Track spending related to sustainable purchases
5. Enhance collaborative vendor relationships
6. Assign accountability to top-level management
7. Foster a culture for innovation
8. Participate in professional networks to share best practices

ASU Center for Organization Research and Design, Arizona State University | Sustainable Purchasing Research Initiative

U.S. Federal Position

- No federal regulation of ecolabels
- Federal Trade Commission regulates deceptive advertising claims
  - False "green" advertising considered #1 area for consumer deception
  - Limited prosecutions
- U.S. Environmental Protection Agency offers some guidance
  - *Guidelines for Environmental Performance Standards and Ecolabels*
  - Only considered a limited number of ecolabels

ASU Center for Organization Research and Design, Arizona State University | Sustainable Purchasing Research Initiative

Ecolabels

- 1990 = ~ 1 dozen
- 2017 = ~ 465
- Different sponsors
  - *Government*
  - *Industry Associations*
  - *Independent Organizations*
    - Standards setting organizations
    - Environmental NGOs

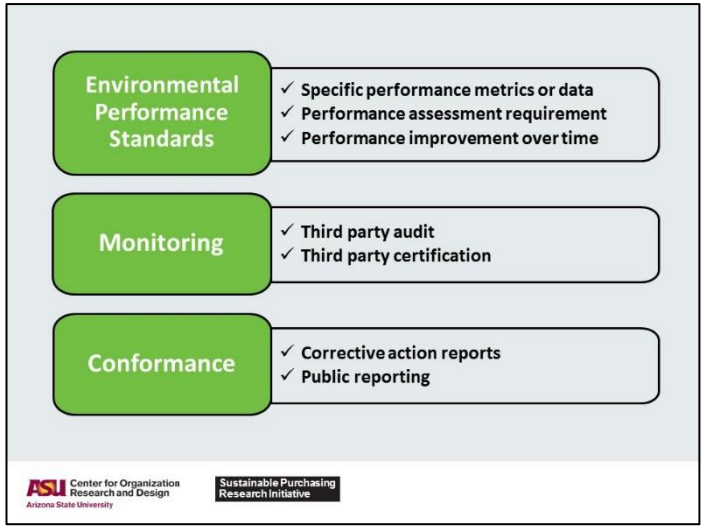
ASU Center for Organization Research and Design, Arizona State University | Sustainable Purchasing Research Initiative

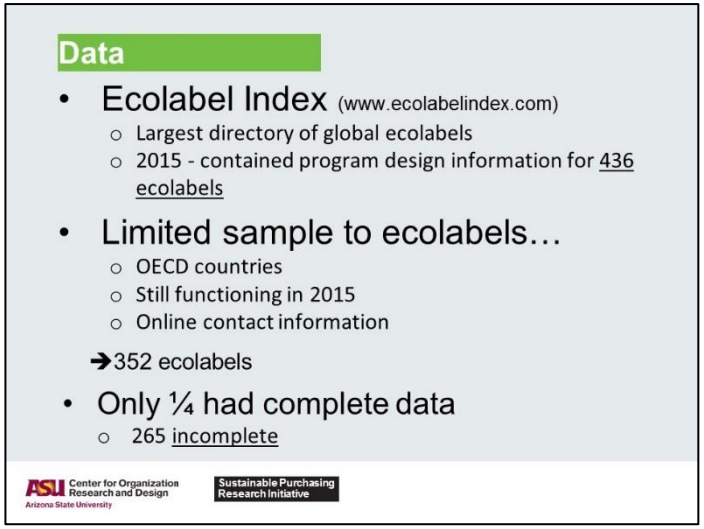
PART TWO: Ecolabel design

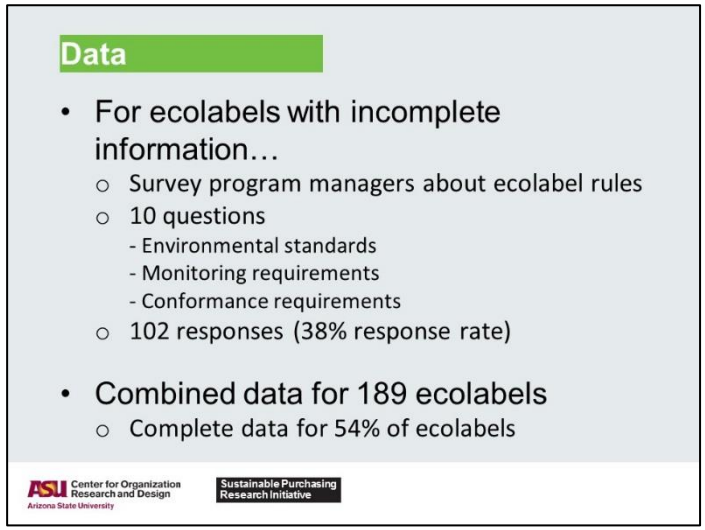
(Darnall, Ji & Potoski, *Regulation & Governance*, forthcoming)

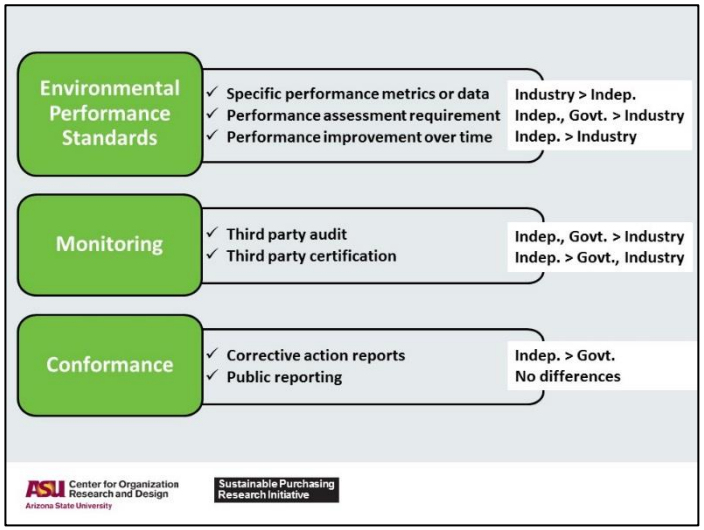
- Are some ecolabels more credible than others?
  - Is sponsorship a reliable information cue (signal) about the rule structures of ecolabels?
  - International study

ASU Center for Organization Research and Design, Arizona State University | Sustainable Purchasing Research Initiative

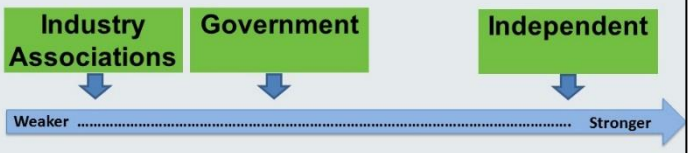

Environmental Performance Standards
✓ Specific performance metrics or data
✓ Performance assessment requirement
✓ Performance improvement over time
Monitoring
✓ Third party audit
✓ Third party certification
Conformance
✓ Corrective action reports
✓ Public reporting
ASU Center for Organization Research and Design
Arizona State University
Sustainable Purchasing Research Initiative


Data
• Ecolabel Index (www.ecolabelindex.com)
○ Largest directory of global ecolabels
○ 2015 - contained program design information for 436 ecolabels
• Limited sample to ecolabels…
○ OECD countries
○ Still functioning in 2015
○ Online contact information
➔352 ecolabels
• Only ¼ had complete data
○ 265 incomplete
ASU Center for Organization Research and Design
Arizona State University
Sustainable Purchasing Research Initiative


Data
• For ecolabels with incomplete information…
○ Survey program managers about ecolabel rules
○ 10 questions
- Environmental standards
- Monitoring requirements
- Conformance requirements
○ 102 responses (38% response rate)
• Combined data for 189 ecolabels
○ Complete data for 54% of ecolabels
ASU Center for Organization Research and Design
Arizona State University
Sustainable Purchasing Research Initiative


Environmental Performance Standards
✓ Specific performance metrics or data
✓ Performance assessment requirement
✓ Performance improvement over time
Industry > Indep.
Indep., Govt. > Industry
Indep. > Industry
Monitoring
✓ Third party audit
✓ Third party certification
Indep., Govt. > Industry
Indep. > Govt., Industry
Conformance
✓ Corrective action reports
✓ Public reporting
Indep. > Govt.
No differences
ASU Center for Organization Research and Design
Arizona State University
Sustainable Purchasing Research Initiative

Rule Structures



Center for Organization Research and Design, Arizona State University
Sustainable Purchasing Research Initiative

Governments need information access for SPPs to be successful

Ecolabels can assist

Sponsorship = important information cue

➔ *Independent ecolabels are more robust*

Center for Organization Research and Design, Arizona State University
Sustainable Purchasing Research Initiative

Additional Information & Articles

- U.S. cities' SPP adoption
- Updates on Japan SPP study
- Ecolabel studies

spa.asu.edu/SPRI

Questions?

Nicole Darnall
ndarnall@asu.edu

Center for Organization Research and Design
Arizona State University
Sustainable Purchasing Research Initiative

Ecolabel Rules/Design Features	Ecolabel Sponsor: Govt (n=31)	Indep (n=117)	Industry (n=41)	Statistical Differences between: (*** p<.01; ** p<.05; *p<.10) Govt/ Indep	Govt / Industry	Indep/ Industry
Environmental Requirement						
Specific metrics or performance data required	90%	79%	93%	–	--	*
Conducts assessments of environmental/social impacts	71%	70%	46%	–	**	***
Requires environmental/social performance improvements over time	61%	62%	44%	–	--	**
Monitoring Requirement						
Third party audit required	68%	64%	49%	–	*	**
Third party certification required	55%	68%	54%	**	--	***
Conformance Requirement						
Corrective action reports required	65%	80%	68%	*	--	--
Assessment/audit reports publicly	36%	38%	24%	–	--	--

Center for Organization Research and Design, Arizona State University
Sustainable Purchasing Research Initiative

Ecolabel Rules/Design Features	Ecolabel Sponsor: Govt (n=31)	Indep (n=117)	Industry (n=41)	Statistical Differences between: (*** p<.01; ** p<.05; *p<.10) Govt/ Indep	Govt / Industry	Indep/ Industry
Environmental Requirement						
Specific metrics or performance data required	90%	79%	93%	--	–	**
Conducts assessments of environmental/social impacts	71%	70%	46%	--	**	***
Requires environmental/social performance improvements over time	61%	62%	44%	--	–	**
Monitoring Requirement						
Third party audit required	68%	64%	49%	--	*	**
Third party certification required	55%	68%	54%	*	–	**
Conformance Requirement						
Corrective action reports required	65%	80%	68%	*	–	--
Assessment/audit reports publicly	36%	38%	24%	--	–	--

ASU Center for Organization Research and Design
Arizona State University

Sustainable Purchasing Research Initiative