

# Public Administration Review

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## How Cities Are Addressing Climate Change Through Sustainable Purchasing

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The Trump Administration's withdrawal of the United States from the [Paris Climate Accord](#) -has increased the focus on local governments to address climate change. In response to this withdrawal [347 U.S. mayors](#), representing 65 million Americans, have committed to decrease greenhouse gas emissions (GHG) in their cities. How might cities accomplish this? While cities can reduce emissions by purchasing fuel efficient fleets, retrofitting their building with better insulation, etc., mitigation is limited if cities continue to purchase goods and services that are produced with carbon intensive technologies. The opportunity here is for cities to focus on their overall carbon footprints, as opposed to their direct

emission reductions only. To do so, they will need to implement a sustainable purchasing policy (SPP).

Sustainable purchasing represents a major opportunity because U.S. cities annually purchase \$1.72 trillion of goods such as chemicals, electronics and office materials, which is comparable to the size of the Italian economy, the 9th largest in the world. These purchases have a carbon footprint nine times that of buildings and fleets, which create significant GHG emissions in cities. By purchasing climate-friendly products, cities not only reduce their carbon footprint, they also help green their supply chain, thereby making it easier for other customers to purchase climate-friendly products as well.

To assess the how cities are pursuing sustainable purchasing, Arizona State University's (ASU) – Center for Organization Research and Design created the Sustainable Purchasing Research Initiative (SPRI) and conducted a survey of directors in U.S. cities. The findings of this survey inform a research agenda for sustainable purchasing in public administration, as presented below.

### **Sustainable Purchasing: Advancing a Public Administration Research Agenda**

Organizations do not always evaluate policies with fresh eyes. They are often bound by routines and past practices. If they buy carbon intensive carpet, they are likely to repeat such purchases in the future. How might they be persuaded to purchase climate-friendly carpet instead? We find that the adoption of such SPP can unleash the process of organizational change. This is important at a practical level, but also to help us understand core public administration issues:

**A. Complementary Policies.** Organizations typically do not adopt an SPP on its own; such initiatives reflect a broader organization vision that is supported by complementary policies. For example, we found that 76% of cities with a city-wide environmental policy, were also SPP adopters and the same proportion of cities with a green building policy were SPP adopters. This compares to only 15% of cities with an environmental sustainability policy and 17% of cities with a green building policy that were non-SPP adopters.

**B. Public Sector Information Systems and Technology.** Cities' information systems and technologies can gather and store sustainable product information about vendors and previous purchases. These systems can also be used to track the extent to which purchasing officers use green product information in the purchasing process. Understanding more about the relationships between information systems, technology and cities' use of SPPs is relevant to public administration research on information gathering, information credibility, and the role of information in decision-making. Our initial research shows that these topics justify additional investigation. Indeed, 45% of cities with SPPs have green product/service lists available to departments when making purchasing decisions. These lists are designed to help purchasing officers identify sustainable products. By contrast, only 13% of cities without SPPs have access to green product/service lists.

**C. Leadership and Management.** Making policy shifts can create political problems within organizations. Sometimes the benefits from the new policy are not visible in the short run and this leads to internal backlash. This is where leadership comes in. Public administration research has long been interested in the role of leaders and organizational

entrepreneurs. Sustainable purchasing provides a window to assess how leaders such as mayors can persuade their cities to pursue a broader sustainability agenda. More than two-thirds (69%) of cities with SPPs report that top management facilitates or strongly facilitates their ability to implement sustainable purchasing. This compares to under half (48%) of cities without SPPs.

**D. Balancing Public Values.** Public managers may have to balance issues of sustainability with social equity objectives (e.g. buy-local policies, women and/or minority owned business purchasing initiatives and small business purchasing policies). For instance, the City of Phoenix has a buy-local policy and a minority owned business policy. However, some climate-friendly products are not sold locally or through minority owned businesses. Implementing the City of Phoenix's SPP has required purchasing officers to consider sustainability alongside other social equity objectives and the city has had to address tensions that arise when pursuing multiple social objectives.

With respect to other U.S. cities, about two-thirds (67%) of SPP adopters have a buy-local policy, as compared to 39% of non-SPP adopters. Similarly, 53% of SPP adopters had a minority-owned business purchasing policy, while only 21% of non-adopters had these policies. What is not clear is the extent to which these policies conflict, as in the case of the City of Phoenix, or whether they are simply part of a broader social purchasing agenda. Assessing these issues will offer practical insights, but also scholarly understanding, about the ways that public managers balance different public values.

In sum, within the U.S., cities have emerged as leaders in climate governance. Sustainable purchasing is an important way by which cities can demonstrate this leadership. It also offers public administration scholars a unique opportunity to expand our knowledge of how public managers adopt and implement policy and manage organizational change.

About ASU's Sustainable Purchasing Research Initiative: SPRI's goal is to provide both actionable advice for practitioners implementing SPP's while advancing public administration research.

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