Better structure leads to better policy implementation.
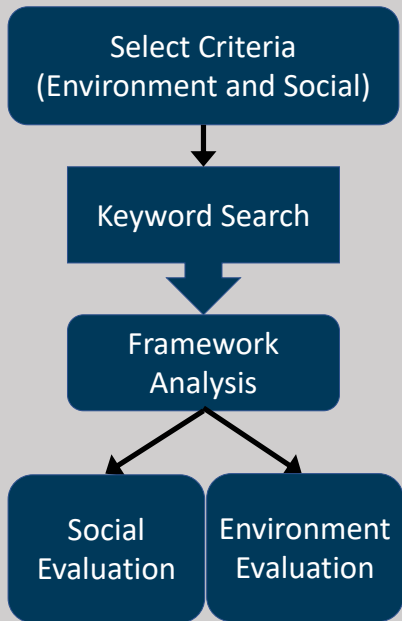
Background

- Sustainable acquisition leads to increased energy efficiency and decarbonization

- Policy is necessary but not sufficient

- Not all policy is equally effective

Method

- Select Criteria (Environment and Social)
  - ↓
- Keyword Search
  - ↓
- Framework Analysis
  - ↙ ↘
- Social Evaluation
- Environment Evaluation

Key Elements Sustainable Purchasing Policy

1. Purpose and Objectives
2. Scope and Definitions
3. Policy Precedent
4. Standards and Certifications
5. Roles and Responsibilities
6. Tracking and Reporting

The Policy Mullet: Good Intentions in the Front, Bad Policy in the Back

Billie Holecek, Alex Newkirk, Christopher Payne, Gerald Robinson

Results

- All policies reviewed included at least one of the elements for effective sustainable purchasing policy language

- Two out of thirty policies included all 6 elements for the environmental analysis

Number of Key Principles Incorporated
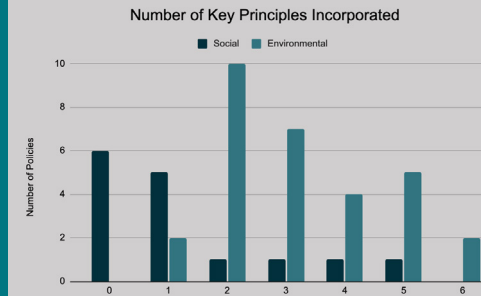
- *Scope and definitions* and *roles and responsibilities* had the highest compliance for environmental policies

- All elements reviewed for social aspects had less than 40% compliance

Compliance by Policy Section
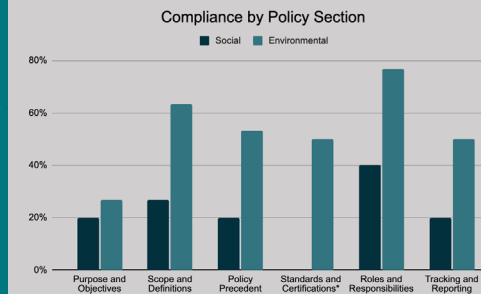
The Policy Mullet: Good Intentions in Front, Bad Policy in Back

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ABSTRACT

To achieve important policy goals like decarbonization, energy efficiency, and social justice, it is important to translate high-level policy into operational practice. Establishing sustainable purchasing goals has been one important part of this translation. However, not all sustainable purchasing policies are equally effective for organizations. In this study, we analyze sustainable purchasing policies collected from 30 public-sector organizations. We discuss a theoretical framework of optimal policy language and use that framework to evaluate the policies we collected.

We believe that an ideal sustainable purchasing policy can increase the likelihood of implementation success by providing more product-specific guidance, giving authority to procurement staff, setting performance targets, and requiring reporting to account for progress. In our review of public sector sustainable purchasing policies, we found that policy language is less than ideal when measured against the framework. Based on our findings, we highlight the best practice language organizations can use in their sustainable purchasing policies to meet sustainability goals. While there is more work needed to inform best practices with sustainable purchasing policies, we recommend that organizations utilize existing frameworks when developing a sustainable purchasing policy to encourage better implementation.

Introduction

In this paper, we examine the current state of publicly available sustainable purchasing policies and highlight best practices within these policies that encourage an effective implementation process. For this paper, "high-level policy" is defined as any ruling, executive order, or policy that is declared at a state, national, or international level and is meant to establish a precedent. We will use the term "organization-level policy" to refer to the formal internal mandates that direct organizations' processes and procedures around implementing high-level policy. For the purposes of this paper, we refer to sustainable purchasing policies as the primary type of organization-level policy.

Sustainable purchasing policies are a useful instrument for organizations to establish leadership commitment, delegate responsibilities, require reporting, and educate their staff. Public sector entities in the U.S., including local governments, higher education institutes, and K-12 school districts, are adopting sustainable purchasing policies to reach sustainability goals such as reducing their greenhouse gas emissions and encouraging socially conscious procurement practices (Darnall et al. 2017). Despite these organization-level policies becoming

more commonplace, many are not well-written and therefore not implemented effectively (Carter, Pisaniello, and Burritt 2010; Morabito et al. 2020). The structure and language of a policy are important to the success of implementing the policy and reaching its stated goals. Clear, collaboratively designed policies are encouraged; common failures in policy design include overly optimistic expectations, little or excessive flexibility, and failing to consider how the policy translates during implementation (Vardiman, Shepherd, and Jinkerson 2014; Hudson, Hunter, and Peckham 2019; Sausman, Oborn, and Barrett 2015). Effective sustainable purchasing policies should consider these failures and establish language that provides direction, accountability, and a strong foundation for the organization to move forward with implementation.

Both high-level and organization-level policies are necessary to drive change; ole Narikae (2017) writes that "lack of supportive and appropriate policies was found to significantly inhibit the success of the implementation of strategies." To ensure sustainable purchasing policies are written for better implementation of high-level policy, it is important to understand the drivers of organizational outcomes and how to represent them effectively in policy language. As Darnall et al. (2017) note, "green purchasing policies have not reached their potential to help local governments mitigate their environmental impacts." Furthermore, translating high-level policy is best accomplished when considering the organizational context in which the policy is applied (Sausman, Oborn, and Barrett 2015). Establishing well-written sustainable purchasing policies in organizations is important to reach the energy and sustainability goals outlined in high-level policies.

An example of high-level policy influencing organization-level policy can be seen in U.S. federal policy implementation illustrated in Figure 1. Executive Order 14057, defined in this paper as a high-level policy, directs federal agencies to develop their own sustainable purchasing policies requiring energy-efficient product procurement. However, even with prevalent high-level policy support, efforts to increase government purchasing of energy-efficient products remain stymied (Morabito et al. 2020).

1970 —

1973: Oil Embargo Act
1975: Energy Policy and Conservation Act of 1975
1978: National Energy Conservation Policy Act

1980 —

1990 —

1992: Energy Policy Act of 1992
1993: EO 12845 Requirement for Agencies to
Purchase Energy Efficient Computer Equipment

2000 —

2005: Energy Policy Act of 2005
2007: Federal Procurement Regulations FAR Part
23.2 and 52.223-15
2007: Energy Independence and Security Act of 2007

2010 —

2020 —

2021: EO 14008 Tackling the Climate Crisis at Home
and Abroad
2021: EO 13990 Protecting Public Health and the
Environment and Restoring Science to Tackle the
Climate Crisis
2021: EO 14057 Catalyzing Clean Energy Industries
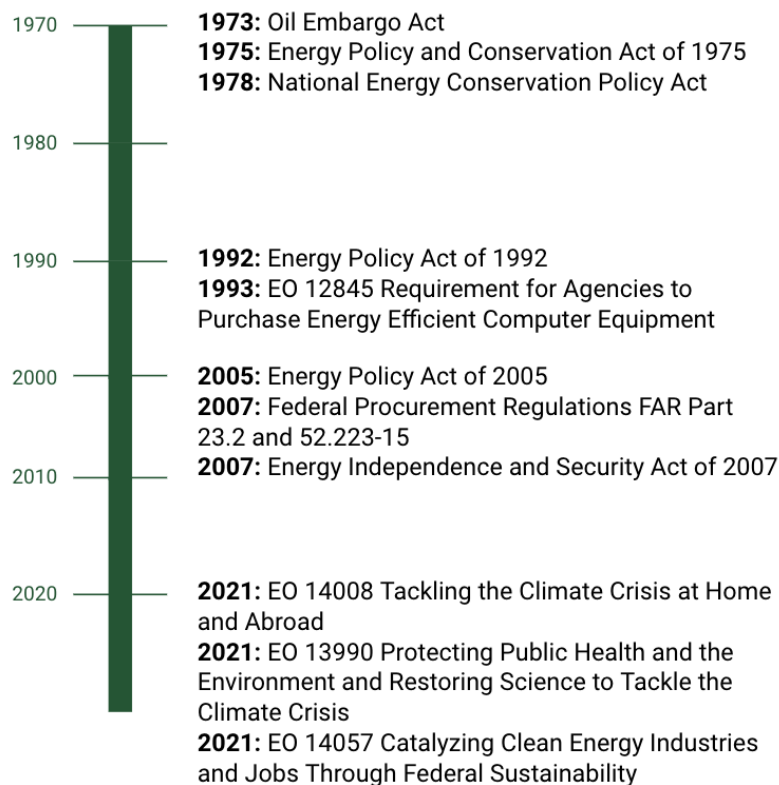and Jobs Through Federal Sustainability

Figure 1: Timeline of federal energy policies.

Since the first federal energy policies in the 1970s, the government has been active in structuring goals and creating mandates to improve energy efficiency and increase renewable energy production. Most recently in 2021, there have been three executive orders that call for an equitable clean energy future, specifically detailing that federal agencies deploy clean energy infrastructure and leverage the government's procurement power to lead the nation into net-zero emissions (Exec. Order 14008 and 14057 2021). Our experience suggests that high-level federal directives often include an intention to provide leadership by example and seek to influence the goals of the larger market, including local government, higher education institutes, and private corporations. This means there is a need for effective sustainable purchasing policies in organizations to implement the national focus of procurement driving equitable decarbonization.

This paper dives into a part of the research gap that Sausman, Oborn, and Barrett (2015) mention in how the structural design of a policy can influence implementation. There are several guidelines and templates published for what sustainable purchasing policies should include, such as the ones created by the Sustainable Purchasing Leadership Council (SPLC), the Responsible Purchasing Network (RPN), the U.S. Green Building Council (USGBC), and the Minnesota Pollution Control Agency (SPLC 2022; RPN 2018; USGBC 2015; Minnesota 2022). The Minnesota Pollution Control Agency published guidelines for developing a sustainable purchasing policy categorized into "six key components," hereafter referred to as the Minnesota framework (Minnesota 2022).

We applied the Minnesota framework to 30 publicly posted sustainable purchasing policies from across the U.S. public sector. This included an analysis of environmental and social components in the policies against the Minnesota framework and provided insights into the state of public sector sustainable purchasing policies.

Methods

Establishing the Policy Review Criteria

Using the Minnesota framework as the foundation, we further describe the review criteria for each of the six key sections in a sustainable purchasing policy.

Purpose and Objectives

The Minnesota framework states that policies should begin with the rationale for the policy and how it ties in with the organization's existing goals. We expanded upon this in the review by looking for clear and measurable goals stated in the policy. This section establishes the foundation of the policy by stating an organization's commitment to sustainable purchasing and setting an overarching goal for the organization to strive towards and reference in *Tracking and Reporting.* Having strong language in *Purpose and Objectives* is also essential during the implementation of the policy because it informs employees that sustainable purchasing is a priority for the organization.

Scope and Definitions

Scope and Definitions explain how the policy should be applied and for what product areas. Effective scope language could include addressing the prioritization of sustainable products compared to other purchasing factors (i.e. cost, small business purchasing requirements) or what type of purchase pathways the policy applies to. Definitions, found either dispersed within the policy or listed in a section of the policy, help organizations understand the expectations of applying the policy. When organizations are operationalizing around their sustainable purchasing policy, detailed language for *Scope and Definitions* is necessary to educate employees on when to reference the policy during their purchasing processes.

Policy Precedent

The Minnesota framework notes that "a sustainable purchasing policy is strengthened when it is connected to other existing directives". *Policy Precedent* connects strongly to this paper's rationale for the need for organization-level policy to uphold high-level sustainability and decarbonization policies. Referencing high-level policies, whether they be international (e.g. U.N Sustainable Development Goal 12.7),[1] federal (e.g. Executive Order 14057), or at the state level (e.g. California Public Contract Code 12400-12404)[2] can reinforce the goals stated in the organization's sustainable purchasing policy and lend weight to the implementation of the

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[1] U.N Sustainable Development Goal 12.7: https://sdgs.un.org/goals/goal12

[2] California Public Contract Code 12400-12404:
https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=PCC&division=2.&title=&part=2.&chapter=6.&article=

policy. The same is true of referencing internal policies and procedures when appropriate, like the organization's construction design standards or its larger sustainability plan.

Standards and Certifications
This is one of the most important sections to include in a sustainable purchasing policy as it establishes that "sustainable purchasing" means buying products that are verified ecolabels or third-party certified products. It is best practice to directly state what standards and certifications are applicable for what product categories. Establishing strong *Standards and Certifications* in a sustainable purchasing policy means there are clear guidelines for acceptable sustainable products that can also be passed along to organizations' vendors.

Roles and Responsibilities
An effective sustainable purchasing policy will delegate responsibilities to specific roles within an organization to ensure effective implementation of the policy's goals. This means identifying the relevant duties of all those involved in purchasing processes in the organization, and including the roles of entire departments and specific positions when considering how to implement the policy. Explicit *Roles and Responsibilities* language around delegating sustainable purchasing tasks helps establish accountability and clear pathways of action in the organization.

Tracking and Reporting
An important part of understanding the effectiveness of any policy is based on the ability to measure its effect before and after implementation. This is not well-documented for sustainable purchasing policies, in part due to the lack of tracking and reporting of organizations' purchasing practices. To understand an organization's progress towards its sustainable purchasing goals, the policy must establish specific guidelines for tracking and reporting sustainable purchasing, including the type of reports to expect and a timeline for reporting. Setting a timeline or specific reporting intervals for deliverables also helps create accountability among those who will be implementing the policy.

Table 1 provides a summary of the review criteria for each section that the sustainable purchasing policies will be reviewed against. We will use this theoretical framework of optimal policy language to evaluate the policies we collected.

Table 1: Theoretical Framework for a Sustainable Purchasing Policy

Six Key Sections of Sustainable Purchasing Policy	Review Criteria
Purpose and Objectives	- Ground the policy in the organizational mission - Emphasize what impact the policy can make - Set clear, achievable and measurable goals
Scope and Definitions	- Set the scope and boundaries of the policy - Include definitions for any key terms

Policy Precedent	● Connect to other existing policies on the local, state, or national level ● Include the exact reference to any internal and external policies
Standards and Certifications	● Clearly state which third-party standards to use for each product category ● Consider providing or referencing a qualified product list
Roles and Responsibilities	● Identify who will be directly involved in the purchasing process ● Identify who will be responsible for data collection and progress tracking
Tracking and Reporting	● Require a process for tracking green/sustainable purchases ● Set dates for reports and deliverables

Developing the Sample of Policies

Having established clear definitions, we turned to applying that framework to enacted policies. Those policies were identified by internet keyword searches for "sustainable purchasing policy" and "environmentally preferable purchasing policy." Policies were also collected from lists on purchasing support websites like the National Association of State Procurement Officials (NASPO) and Responsible Purchasing Network (RPN). We chose a sample size of 30 sustainable purchasing policies for our exploratory analysis; there was minimal bias in the selection as we chose the first policies to show up in the search. Most of the policies were standalone policies, meaning they were not a part of the organization's larger purchasing policy or sustainability plan. This was not meant to be a comprehensive collection of all public sector sustainable purchasing policies, rather it represents a sample of available policies. Figure 2 shows the majority of organizations that currently have public-facing sustainable purchasing policies are local government and higher education organizations.
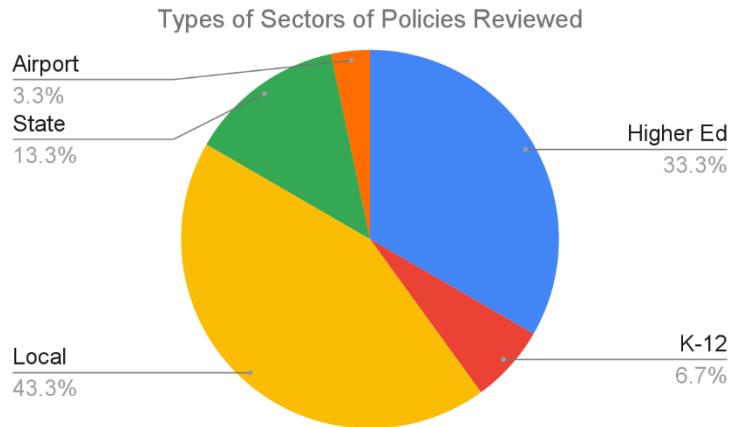
Figure 2: Distribution of sectors in the policy review

The policies collected happened to be split evenly between those labeled as "environmentally preferred purchasing policy" and "sustainable purchasing policy." In this paper, we refer to the policies reviewed comprehensively as sustainable purchasing policies. A common definition of sustainability references three intersecting pillars that make up sustainability; social, economic, and environmental (Purvis, Mao, Robinson 2017). Sustainable purchasing is typically distinguished from environmentally preferable purchasing as being conscious of social and ethical responsibility in procurement (Islam et al. 2017), in addition to buying products that have a reduced impact on the environment (GSA). With this context, we chose to analyze a sustainable purchasing policy's language from both an environmental and social context. A policy was marked as compliant or non-compliant for each of the six sections identified in the Minnesota framework as best practices for a sustainable purchasing policy. There was a total possible score of '6' for including effective environmental language in the environmental analysis. The social analysis repeated this method, applying the Minnesota framework to identify the effective social language for the same sections in the sustainable purchasing policies. We did not conduct a social analysis for environmentally preferred purchasing policies, as these policies are predominantly focused on encouraging environmentally friendly products; only the self-proclaimed sustainable purchasing policies were reviewed for effective social language. In addition, the *Standards and Certifications* section was omitted from the social analysis[3] making '5' the total possible score for sustainable purchasing policies undergoing a social analysis.

Given the interpretative nature of the policy review against the Minnesota framework, all policies were reviewed by at least two researchers. If there was a dispute on the scoring for any of the sections, a third researcher would make the final determination on compliance. During the policy review process, we also made note of other common themes or best practices found in the policies that could not be directly categorized under any of the six sections.

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[3] Further discussion on why the *Standards and Certifications* section was not included in the social analysis can be found in the Results section

Results

All 30 policies reviewed met at least one of the criteria for effective sustainable purchasing policy language, but only two policies met all six criteria for the environmental analysis. Figure 3 shows that 70% of policies reviewed scored between '2' and '4' for the number of sections that meet the requirements for good environmental language in a sustainable purchasing policy. This finding shows that while the majority of policies include effective environmental language, far fewer policies check all the boxes for an effective sustainable purchasing policy.

Out of the fifteen policies that underwent the social analysis, the majority (73%) either did not include strong social language at all or only did for one section. Figure 3 shows that only one of the sustainable purchasing policies reviewed met the requirements for social language in all five sections. This indicates that there is significant room for improvement in establishing effective language around social components of sustainable purchasing policy.
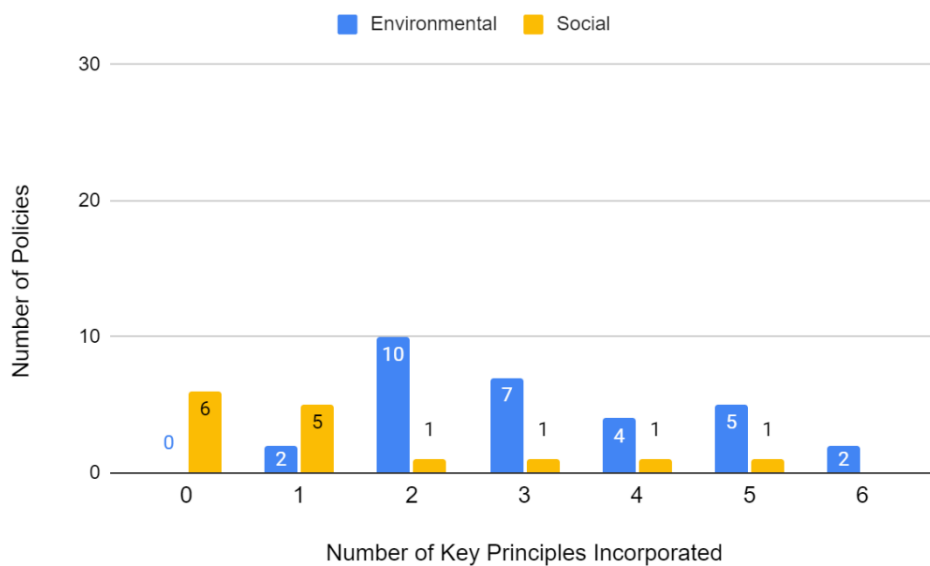

Figure 3: Number of policies with effective environmental and social language.

Moving on to examine each of the six sections in more depth, Figure 4 summarizes the findings of the environmental analysis. Of the six sections considered, *Roles and Responsibilities* was the most popular section for the environmental analysis where 77% of policies included effective environmental language. This was followed by *Scope and Definitions* where 63% of policies met the requirements for environmental language. *Policy Precedent*, *Standards and Certifications,* and *Tracking and Reporting* all hovered around the average compliance rate of 53%. *Purpose and Objectives* had the lowest compliance of all the sections with only 27% of policies reviewed including effective environmental language.
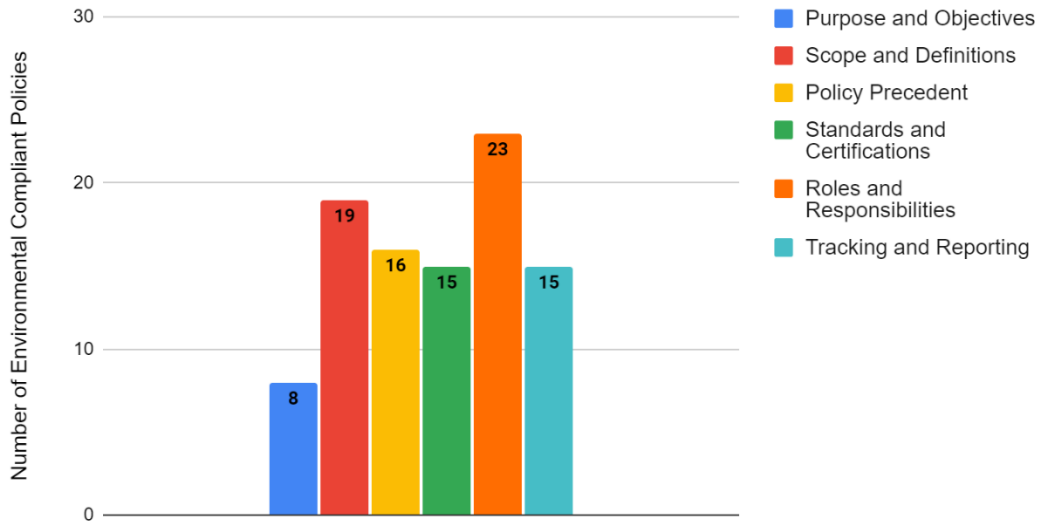
Figure 4: Number of policies with compliant environmental language across the six sections

Results of the social analysis, shown in Figure 5, tell a different story of low compliance across the board for all five sections reviewed. Out of the fifteen sustainable purchasing policies reviewed for inclusion of effective social language, the sections averaged 25% in compliance. The standout was *Roles and Responsibilities* although only six policies (40%) included effective social language.
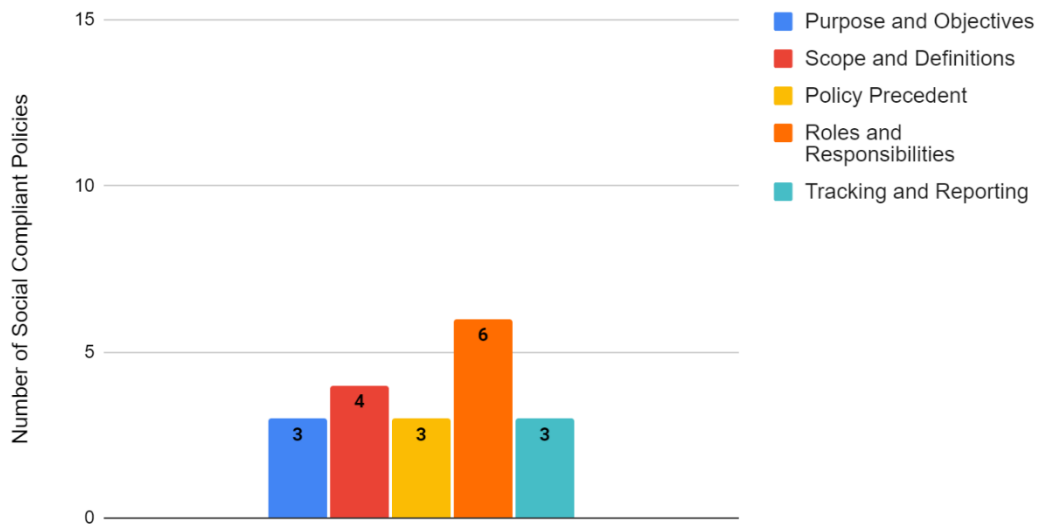

Figure 5: Number of policies with compliant social language across the six sections

We move on to examine each of the sections in greater detail to reveal how and why organizations should incorporate effective language for different components of a policy.

Purpose and Objectives

Purpose and Objectives had the lowest compliance of the six sections for including effective environmental policy language, while the results of social analysis for this section were below the average of the other sections. Two policies met the policy language requirements for both the environmental and social analysis of the *Purpose and Objectives* section. We observed that while all the policies reviewed had dedicated a section to describing the purpose or background of the policy, most did not include a measurable goal for sustainable purchasing. Without providing this crucial direction, accountability, and commitment in the policy, including a Purpose section adds little when implementing a policy.

Scope and Definitions

With more than half of the policies (63%) reviewed for *Scope and Definitions* meeting the requirements for environmental language and 27% including effective social language, this section had a comparatively strong showing. Three policies included effective language for both environmental and social considerations. The majority of policies included definitions, but often what was missing was a scope describing exactly how the policy would be applied and its prioritization among other procurement goals. The sustainable purchasing policies that successfully wrote scopes considering an environmental context should extend that language to their organization's standards of social purchasing when applicable.

Policy Precedent

Compliance with effective environmental and social language in *Policy Precedent* was around the average of all sections reviewed. Three policies met both the required environmental and social language for *Policy Precedent*. If organizations want to strengthen the tie between procurement practices and overarching decarbonization goals, it is essential to establish connections to existing relevant policies in their purchasing policies. This will ground the organization-level policy in a higher authority and grant it more credence when looking to implement the policy. For the social analysis, we speculated that high-level policies may not yet be prevalent enough to reference. Policies around fair-trade practices, environmental justice, labor rights, social equity, and more might not yet be commonplace in the public sector.

Standards and Certifications

Despite considering *Standards and Certifications* to be of critical importance in sustainable purchasing policies, the results of the environmental analysis show that only 50% of policies reviewed included sufficient environmental language. We were strict in marking policies as compliant only if the policies required third-party environmental certifications for different product categories. This not only ensures that organizations are mandating the purchase of verified environmental products, but it also makes locating information easier for staff that are executing the policy. The social analysis was not conducted for the *Standards and Certifications* section. We determined that there was significant variation in what could constitute social considerations in sustainable purchasing and how it could be third-party certified. For example, organizations could measure social purchasing by the supplier ethics or diversity and would

require purchasing from B-corps or certified small or minority-owned businesses. Organizations could also consider social purchasing as the types of products supplied, whether they are certified Fair-Trade products or sourced locally. Since this is outside the scope of this paper, we did not consider *Standards and Certifications* when reviewing policies for the social analysis. Examining how to measure social considerations in sustainable purchasing and how to best incorporate them into policy is a potential area of future research.

Roles and Responsibilities

Roles and Responsibilities had the most policies in compliance with the environmental analysis at 77% and the social analysis resulting in 40% of policies including effective language. Given this congruence, it follows that *Roles and Responsibilities* had the highest number of policies that included effective environmental and social out of all the sections at six policies. We speculate one potential reason for the high compliance of this section is that it is well-understood that organizational-level policies are meant to delegate specific tasks to staff. This adds a level of accountability that is lacking in high-level policies, but can be a useful reference when implementing sustainable purchasing policies.

Tracking and Reporting

Like *Policy Precedent*, the results of the policy review for *Tracking and Reporting* were just below average with 50% and 20% compliance respectively for environmental and social language. Three policies out of the 30 reviewed included the necessary language for both environmental and social analyses in this section. The lack of language in policies around *Tracking and Reporting* corresponds to the data gap with organizations' sustainable purchasing metrics. Organizations struggle with being able to understand their progress with sustainable purchasing, in part because there might never have been an official mandate requiring them to track it. Including more reporting requirements in sustainable purchasing policies can be a start to addressing this missing data.

Additional Findings

In addition to reviewing the 30 policies for effective language, we also noted other potential best practices observed in the policies that were outside the scope of the six sections in the Minnesota framework. This included a revision history for the various edits of the policy, sections dedicated to describing the continuing maintenance of the policy, sections on non-compliance, and sections distinguishing between mandatory and best practices with sustainable purchasing.

Both the addition of a revision history section and a section dedicated to the continuing maintenance of the policy can be important to keeping the sustainable purchasing policy relevant within the organization and up to date with current sustainable purchasing standards (Burwell, 2017). We believe a section on non-compliance, describing the organizational consequences of not adhering to the policy, will motivate conformity among employees. Furthermore, sustainable purchasing policies that separate minimum requirements and best practices can encourage employees to strive for the best practices.

The following discussion makes several observations based on the different sections reviewed for each policy, the type of analysis conducted, and areas of future research.

Discussion

Based on a review of 30 publicly available sustainable purchasing policies, while around half contain effective environmental language (53%), only three out of fifteen (20%) include effective social language. Despite that sustainable purchasing is meant to also consider equity, ethics, diversity, and distribution practices in procurement, most of the self-proclaimed sustainable purchasing policies had ineffective policy language in regards to the social and equity considerations, if they had any language at all. If an organization's goal is to increase sustainable purchasing and incorporate equity considerations in their procurement practices, there needs to be stronger language incorporated into their policies around the social considerations. Two examples of effective social language in sustainable purchasing policies are shown in italics below.

> "…*sustainable purchasing reporting requirements are:*
> - *Reporting on percent Green Spend beginning at the close of the first full Fiscal Year after a category is added to the Guidelines.*
> - *Reporting on percent Economically and Socially Responsible Spend beginning at the close of Fiscal Year 2018/19.*"

The above quote taken from a sustainable purchasing policy is an example of commendable *Tracking and Reporting* language, where it specifies the type of report required and establishes a deadline. Separating the reporting requirements for environmental and social purchasing is another best practice as it creates accountability for both considerations in sustainable purchasing.

Table 2 displayed below is a sample from a list of policy task assignments and the corresponding responsible parties laid out in a sustainable purchasing policy. This straightforward manner of delegating tasks is a prime example of *Roles and Responsibilities* language making it easier for employees to understand their roles in implementing the policy.

Table 2: Sample *Roles and Responsibilities* language from a policy

Elements of the Sustainable Purchasing Policy	Relevant Party
Inclusive, Local, and Environmental Purchasing Statement	*Business Manager*
Monitoring, Tracking, and Evaluation	*Sustainability Coordinator*

Beyond a lack of social considerations in the sustainable purchasing policies, many of the policies reviewed spent a considerable fraction of their policy discussing why their policy was needed and what the impact is of sustainable purchasing. Despite this discourse, we found it was often a case of "saying a lot while saying nothing at all" where there was verbiage on background material. While it is important to ground the policy in the organization's mission, the goal is to be concise and specific. Samples of exemplary policy language are below. There is

potential for future research examining how the structure of a sustainable purchasing policy factors into the effectiveness of its implementation. This could mean investigating how the types of sections included, the length, and the content of a policy influence sustainable purchasing in an organization.

> "*The goal of this policy is to increase sustainable procurement by 20% by 2025 and by 25% by 2030, in accordance with the recent Board of Governors Climate Resolution of May 2019.*"

The direct quote from a policy shown above is effective *Purpose and Objectives* language because it definitively states a sustainable purchasing goal to be reached by a specified date. It even contains good *Policy Precedent* language by tying their sustainable purchasing goals to a larger internal sustainability mandate. One area of improvement that could be made with this language would be to further distinguish the goals by environmentally preferable and social purchasing rather than stating 'increase sustainable procurement' in general.

> "*All…employees shall utilize…sustainable procurement guiding principles and follow sustainable procurement best practices when planning and designing projects, developing project and operations budgets, developing asset management plans, writing product and service specifications or standards, selecting materials, making purchasing or supplier decisions, and developing and managing…contracts and price agreements as applicable to their roles and responsibilities and/or to a specific project.*"

The above language lists out the various purchasing pathways that the policy would apply. This is a good example of *Scope and Definitions* language granted that the policy provides further context on what constitutes sustainable procurement in other parts of the document.

Another theme observed across several policies was the inclusion of references to other documents, whether it was referring to another internal organization-level policy or guideline, a third-party certifier, or an external policy. In these cases, we would encourage including a link in the policy to the references so that it is easily accessible to those reading the policy. An example of that best practice in sustainable purchasing policies is below.

> "*…specifies the use of [EPEAT](#) certified computers and monitors. EPEAT-registered products meet strict environmental criteria that address the full-product life-cycle energy conservation, toxic materials, product longevity and end-of-life management EPEAT criteria review*"

The direct reference of a third-party environmental certifier, EPEAT, with a specific product category, computers and monitors, makes the above language a strong example for the *Standards and Certifications* section. Including a hyperlink to the official EPEAT website that contains a registry of EPEAT-qualified products is another best practice that helps employees quickly locate the products and information they need.

In some cases, policies referenced their companion manual or guideline for sustainable purchasing to instruct employees on the implementation of the policy in their organization. While we consider an implementation guide to be a powerful tool to supplement the content of a sustainable purchasing policy, it is still necessary to ensure the policy is written to provide sufficient instruction and direction by itself.

> "*City policies and plans that support the goals of environmental preferable procurement include the Sustainable City Major Strategy of the General Plan, the Pollution Prevention Policy, the Green Building Policy, the Zero Waste Strategic Plan (adopted October 2008), the Strategic Energy Plan (adopted September 2009), and the proposed Climate Action Plan.*"

The section from a policy quoted above provides a good example of *Policy Precedent* language by the way it connects its policy with other major and relevant policies within the organization. This includes mentioning parallel policies like a Green Building Policy and Zero Waste Strategic Plan, as well as more comprehensive internal policies like its Sustainable City Major Strategy of the General Plan and Climate Action Plan. The language can be improved by also referencing a high-level policy; for example, a state mandate or a federal executive order since it is a city policy.

We also observed that several of the policies used the same language verbatim and even directly reference other organizations' sustainable purchasing policies.[4] Given that the results showed that most of the publicly available policies do not contain effective environmental language, and none of the policies have strong language around social considerations, this can become an iterative practice of bad policy language informing other policies.

Conclusion

In this paper, we have found that most public sector sustainable purchasing policies do not meet best practice recommendations for effective policy design. Strong organization-level policy is necessary to implement equitable decarbonization measures, decrease energy use, and increase sustainable purchasing. We explored different criteria to include when designing a sustainable purchasing policy and our conclusions can be further developed with more research into what constitutes an effective sustainable purchasing policy, especially exploring the connection of an organization's progress with sustainable purchasing to its sustainable purchasing policy. We recommend that organizations employ existing frameworks, like the Minnesota framework, when developing their sustainable purchasing policy. With increasing national pressure to buy sustainable products and spotlight equity practices, it is becoming more

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[4] Multiple policies contained this exact statement or a slightly modified version of this statement. This arguably reduces the authority of the policy and may not be a best practice despite being propagated among several different policies. "Nothing contained in this policy shall be construed as requiring a department to procure products that do not perform adequately for their intended use, exclude adequate competition, or are not available at a reasonable price in a reasonable period of time."

important than ever to create a sustainable purchasing policy that supports successful implementation.

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