Promoting sustainable public procurement through economic policy tools: From moral suasion to nudging

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Abstract

As the climate crisis accelerates and governments aspire to achieve more circular economies, this article encourages experimentation with innovative, interdisciplinary, and sustainable approaches that exploit governments' enormous spending power. Rather than waiting for legislative or regulatory changes, the article advocates driving sustainable public procurement (SPP) through efficient and available behavioral-economics-inspired "green defaults," nudging, persuading procurement officials, and, more broadly, rethinking the value proposition when confronted with price premiums.

Keywords

Comply or explain, Government contracts, Green defaults, Greenwashing, Life cycle cost analysis, Nudging, Sustainable procurement.

1. Introduction

In reaction to the April 2022 Intergovernmental Panel on Climate Change (IPCC) report, the United Nations (UN) Secretary General warned: "We are on a fast track to climate disaster […]. Climate promises and plans must be turned into reality and action, now" (UN, 2022). In an era of outsourced government (Schooner & Swan, 2012; Schooner & Greenspahn, 2008), public procurement is poised to contribute to critical governmental efforts to mitigate the climate crisis in numerous ways: purchasing less harmful solutions, avoiding fossil fuel burning energy sources, and investing in, and creating markets for, new or more energy-efficient technologies, products, and services, ranging from solar panels and windmills to more sustainable foods and public infrastructure (Klingler, 2021; Klingler a, 2022). Government procurement spending, representing 13-20 percent of global GDP (The World Bank, 2020), offers fertile ground for accelerating sustainability initiatives, particularly to the extent that, increasingly, Constitutions, laws, and executive proclamations reference social and environmental goals (see e.g., Swiss Constitution, 1999, Articles 2 and 73 on "sustainable development"; U.S. Exec. Order No. 14057, 2021).

Experience, however, suggests that the primary hurdle impeding the public procurement community's conceptual and operational acceptance of evolving sustainable public procurement best practices derives from the longstanding, deeply entrenched tyranny of low purchase prices (Schooner, 2021, pp. 31; Schooner & Matsuda, 2021, pp. 7; Schooner & Speidel, 2020, pp. 37). Historically, governments designed procurement regimes to prioritize objectivity, transparency, and corruption control or integrity (Schooner, 2002). The most common model, prevalent through the end of the 21st Century, emphasized publicly advertised solicitations, highly constrained offers (ranging from tenders to bids and proposals), and easily determined "winners," typically the

responsive firm that offered the lowest evaluated price. Not only were such regimes easy to replicate, but they required a lesser-skilled professional workforce and accommodated simple oversight and policing. Against that backdrop, many senior government officials scowl at governments consenting to above-market purchase prices and recoil at the thought of selecting a sustainable offer that requires what is perceived as the payment of a "price premium."

Less than a decade ago, the EU and other countries reached a consensus to overcome the procurement community's obsession with the lowest purchase price, and integrated sustainable considerations into the concepts of value for money and the most economically advantageous tender (Directive 2014/24/EU, Article 67). However, despite this regulatory opportunity to consider non-economic interests, rigid thinking, all-too-often dominated by the oversight of audit and budget institutes, struggles to acknowledge that the historical compliance-based approach to procurement (e.g., ensuring that the rules were followed), exacerbated by generations of transactional procurement data (e.g., how much was spent, how many offers were received, who and what type of firms received the contracts), fails to answer the government's fundamental consumer questions: Does what we purchased work? Did it last? Did it aid us in achieving our governmental mission?

The evolving climate crisis necessitates that we answer a far more challenging question: how do we internalize what we previously ignored as environmental "externalities" but now recognize as the real effects of governments' purchasing decisions? The UN Secretary General bemoaned: "Major cities under water. Unprecedented heat waves. Terrifying storms. Widespread water shortages. The extinction of a million species of plants and animals" (UN, 2022). These are the "externalities," or the long-term effects of "saving" the marginal dollar by relying on the low-cost "brown" or "gray" energy solutions that defined and drove the industrial revolution (Garrett-Peltier, 2017; United Nations Economic Commission for Europe, 2011). Today, as the climate crisis accelerates, proactive government leaders increasingly realize that the question is no longer "how can we afford to make the investments required to procure more sustainable solutions?" Rather, as each successive IPCC report reminds us, the critical question becomes: "how can we afford not to?"

Our challenge, against this backdrop, is nothing less than a paradigm shift in public procurement toward greater sustainability and quality competition (Swiss Federal Procurement Conference (BKB), 2021; Swiss Federal Act on Public Procurement (PPA), 2019, Article 2) to dramatically alter procurement behavior and fundamentally change generations of procurement culture. Among other things, we must more intentionally define public procurement requirements or "needs" and justify (sometimes) higher upfront expenditures to reduce future carbon emissions. To the extent that most governments are reinventing their legislative and regulatory regimes too slowly, the authors suggest that familiar, readily available economic tools may help. In addition to reframing the value proposition, we also suggest that altering default positions (and economic model assumptions) with gentle behavioral "nudges" can open the door to procurement practices more likely to permit governments to adapt to and mitigate climate change.

2. Value: From price to sustainability

A. Reframing the value proposition

Procurement professionals commonly hide behind the specter of "higher prices" in rejecting sustainable procurement practices (Schooner & Speidel, 2020). On the one hand, this default position is understandable to the extent that most public procurement regimes (1) were designed

to prioritize low purchase prices (which offer the benefit of objectivity) and (2) operate under persistent budget constraints. A more strategic (and economic) analysis exposes the fallacy of this type of thinking, yet the ingrained bias remains and must be overcome if governments are to achieve less harmful climate-related outcomes.

B. Can doughnut economics and procurement performance measurement change culture and overcome risk aversion?

The age-old adage "what gets measured gets managed" introduces both a daunting impediment to the adoption of sustainable public procurement practices, but also a powerful weapon to defeat the tyranny of low purchase prices (Barnett, 2015). Effectively integrating sustainability considerations into performance measurement (Klingler b, 2020; Schooner & Matsuda, 2021; Schooner & Speidel, 2020) pits consumer- or value-oriented outcomes against the formalism of low-price objectivity. When public procurement data systems focus exclusively on transactional data and venerate low purchase prices, low-price shoot-outs represent the gold standard, the coin of the realm. Consumers and behavioral economists routinely reject this simplistic rigidity. Instead, they recognize that low prices can represent false economies if what was purchased doesn't work, meet their needs, or give them joy (Schooner & Matsuda, 2021).

Fixation on low prices proves particularly problematic in public procurement, where governments rely upon the private sector for the goods and services which they need to achieve government missions (Schooner & Swan, 2012; Schooner & Greenspahn, 2008). As Raworth explains in *Doughnut Economics*, "due to the scale and interconnectedness of the global economy, many economic effects that were treated as 'externalities' in the twentieth century have turned into defining social and ecological crises in the twenty-first century" (Raworth, 2017). By treating environmental effects and their associated costs as "externalities" in the perennial pursuit of low prices, governments have ignored the real, long-term costs of their procurement decisions or, at best, devalued the future costs of economic harms for which they must later bear responsibility (Union of Concerned Scientists, 2008). For example, unlike most consumers that weigh potential long-term savings, governments' myopic focus on low purchase prices justified choosing fossil fuel burning vehicles over hybrid or electric, without acknowledging that doing so "buys" future health care expenditures, infrastructure damage and loss, food and water shortages, and, at worst, regional instability, migration, and war (Stand & Dimsdale, 2017; Klare, 2019).

C. Escaping the tyranny of low prices: life cycle cost analysis as a global best practice

Accordingly, procurement officials need to restate and rethink the value proposition upon which they base their purchasing decisions. The rapidly evolving global best practice entails adopting life-cycle cost (LCC) or life-cycle cost analysis (LCCA) (Czarnezki & van Garsse, 2019; Czarnezki, 2019; Andhov et al., 2019; Schooner & Matsuda, 2021; International Organization for Standardization, 2017). Among other things, adopting LCCA tools—in acquisition planning, proposal evaluation, or comparing solutions—permits governments to internalize climate-related externalities or, in other words, consider the long-term effects of any given acquisition strategy or contractual outcome. LCCA thus permits governments to consider harmful environmental effects of a proposed contractual solution, or an offer's social value, or both.

3. Moral suasion: better than nothing

Moral suasion offers the first of the three "cheap and easy" economic policy tools that we suggest for transitioning this new value proposition from dead letter into practice. To drive behavioral change, moral suasion shifts the focus, more broadly, to what is good or ethical or, quite simply,

"doing the right thing." Moral suasion can either be "pure," when appealing to altruistic behavior, or "impure," when backed by governmental coercion (Romans, 1996). Historically, pure moral suasion has gained traction in environmental law, while impure moral suasion appears mostly in economic policy, primarily deployed by central banks to curb inflation.

A. Morality's role in economic and environmental policy

Although moral suasion, or the influence of moral considerations, remains largely absent from contemporary economic theory, it can play a valuable role in economic analysis (Sutinen, 1997). Adam Smith understood human economic motivation to be multidimensional, focusing on the psychic well-being that resulted from acting morally and receiving others' approval (Smith, 1759; Sutinen, 1997). Similarly, Baumol and Oates found (at least some) potential for moral suasion to affirmatively impact environmental problems through voluntary programs to spur recycling, auto emission-control, and energy conservation (Baumol & Oates, 1979).

In the 1990s, the consideration of other non-economic goals was integrated into regulatory cost-benefit analyses (see Klingler, 2021). U.S. President Bill Clinton's 1993 Executive Order established the basis for most modern cost-benefit analyses, conceding that many consequences of policies are difficult to quantify and emphasizing that qualitative concerns should be considered (U.S. Exec. Order 12866, 1993).

At the same time, "moral suasion appears to be undergoing a modern-day resurrection" (Romans, 1996). Just as President Bill Clinton deployed it to keep steel prices low and avoid labor strikes (Romans, 1996), strong executive statements—such as U.S. President Joe Biden's Executive Order on "Federal Sustainability" (U.S. Exec. Order 14057, 2021) or the European Commission's statement on "making sustainable products the norm" (European Commission, March 2022) — could similarly lead large-scale emitters to assume greater responsibility for their negative externalities—without the use of binding legal power.

B. Moral suasion can be effective

Healthy skepticism surrounds the use of moral suasion, with concerns ranging from the reward of non-compliance and lack of judicial review to uncertain effects on business decisions. Yet moral suasion is not demonstrably inferior to other policy instruments (Romans, 1996). All policies have opportunity costs, and moral suasion is often less costly than competing enforcement alternatives. It is certainly better than doing nothing (Romans, 1996; Sutinen, 1997).

Moral suasion can be an effective economic policy tool anytime the expected cost of non-compliance exceeds the cost of compliance (Romans, 1996). For example, Sutinen concluded that marine debris would be disposed of legally (rather than being "dumped") when the illegal disposal cost, plus the expected penalty, *and* the psychic and social influence cost, *cumulatively* exceed the legal disposal cost (Sutinen, 1997).

While these studies focused on the costs to the regulated party, the same rationale can be applied to costs to society. To achieve more sustainable public procurement, governments can effectively deploy moral suasion if, for example, the costs of carbon emissions from an "unsustainable" contract exceed the costs of delivering a more sustainable solution. Of course, this assumes a culture in which contractors face institutional or reputational harm (like Sutinen's psychic and social influence cost) if they deliver unsustainable products and services.

Effective moral suasion policies require two necessary conditions: (1) the public must support the government's position, and (2) the population to be persuaded must be small (Romans, 1996). In a

democratic framework, the first condition entails public and political support of related policies (Romans, 1996). Evidence of political support of social and environmental sustainability in public contracting appears in new procurement legislation (see Directive 2014/24/EU, Article 67) and evolving procurement guidance (Danish Competition and Consumer Authority, 2018).

The second condition explains why moral suasion used by central bank works in England, but not in the United States. While only five English major banks must be persuaded; the large number of commercial banks in the U.S. makes it impossible to identify the culprits of non-compliance (Romans, 1996). Thus, for moral suasion to drive sustainable procurement, the relevant pool of qualified contractors must be small—such as in the case for complex infrastructure projects (but not for most off-the-shelf commercial items). Hence, moral suasion's potential to promote sustainable public procurement appears greatest (1) where the public perceives an environmental interest and (2) in oligopolistic market sectors.

C. Moral suasion works best in combination with other policy tools

Moral suasion, of course, offers no silver bullet. A study on the preservation of waterfowl habitats in Canada found that "economic incentives […] are inadequate because they ignore nonmarket costs, and that a positive attitude towards habitat preservation cannot be used as a substitute for monetary incentives" (van Kooten & Schmitz, 1992; Romans, 1996). This suggests that (a) while economic incentives do not account for nonmarket costs, moral suasion can and does, and (b) that moral suasion is a valuable complement but *cannot alone* replace financial incentives. Hence, moral suasion works, but only in combination with other policy instruments—such as the ones discussed below.

4. Disclosure: between regulation and nudges

To the extent that leading private sector firms currently possess greater knowledge, insight, expertise, resources, and understanding of many relevant aspects of sustainability than a typical public procurement office, governments need to alleviate what economists call "information asymmetries." Governments can increase internal expertise or outsource information mandates to the private sector. For example, the U.S. Environmental Protection Agency (EPA) Greenhouse Gas (GHG) inventory regime provides a rubric for private sector firms to quantify, assess, attempt to reduce, and most importantly, publicly disclose their Scope 1 (direct), 2 (indirect), and 3 (related, including supply chain) emissions (The Greenhouse Gas Protocol, 2015; EPA, 2011). Similarly, the nascent Science Based Targets initiative (SBTi) offers private sector firms "a clearly-defined path to reduce emissions in line with the Paris Agreement goals" (Science Based Targets, 2021). Thoughtful acquisition planning permits procurement professionals to design competitions, articulate evaluation factors, and craft solicitation inquiries to generate disclosures (e.g., that an offeror generates lesser emissions) that can be weighed against lower offered prices.

At the risk of encouraging "virtue signalling" or, in the pejorative, the expression of a moral viewpoint with the intent of communicating a good character that is exaggerated or insincere, governments may reap significant returns by highlighting competitive preferences for, and contractual awards made to, firms that offer more environmentally friendly solutions (see "peer effect" below). It is easy to underestimate the potential impact of offering firms a competitive advantage if they not only promise, but can demonstrate, lesser emissions than their peer competitors. For example, public procurement experts realize that firms go to great lengths (and willingly sustain significant losses) to obtain their first government contract (or their first contract with a specific government ministry), because such a contract serves as an imprimatur or quality

seal that increases access to other markets, such as sub-central government instrumentalities. At the same time, from a government consumer perspective, modelling, or recognizing specific contractor actions that serve as a positive example (see "heuristics" below), is widely recognized as a fundamental component of public procurement training and professional development.

Governments possess other common procurement-related tools that might be deployed based upon these firms' disclosures (or failures to disclose). For example, most states operate legal regimes to formally and publicly exclude corrupt or incompetent contractors (Swan, 2021). Governments could expand the mandates of "blacklisting," suspension, and debarment regimes to eliminate firms that continue to rely on (or exclusively offer) fossil fuel solutions. Even if these tools are not aggressively deployed in this manner, we expect they will come to the fore as states identify and seek to not only "shame" but avoid firms that over-promise or fail to deliver on their emission-reduction promises, or worse, engage in demonstrable "greenwashing" by claiming that their products are more environmentally friendly than science can confirm (Kenton, 2022).

5. Nudging procurement agencies into buying green

Nudging utilizes the human preference for the path of least resistance. As Thaler and Sunstein summarize: "a nudge is any aspect of the choice architecture that alters people's behavior in a predictable way without forbidding any options or significantly changing their economic incentives. To count as a mere nudge, the intervention must be easy and cheap to avoid. Nudges are not mandates. Putting fruit at eye level counts as a nudge. Banning junk food does not" (Thaler & Sunstein, 2008).

We suggest two common nudges—green defaults and social-proof heuristics—to promote sustainability in public procurement.

A. Green defaults and the "comply or explain" approach

In nudge theory, the default effect describes an agent's tendency to accept the "automatic" or pre-selected option (Altman, 2017). Possible explanations are the cognitive effort (Gigerenzer, 2008) and the switching costs it takes to change the default (relying on human inertia or laziness) or an interpretation of the default as a recommendation from the policy maker (McKenzie, 2008). For example, in a rural German town that adopted renewable energy as the default source of electricity, ninety-nine percent of households embraced the green energy default; in other German towns, usually only one percent would use green energy (Pichert & Katsikopoulos, 2008). In other words, a green default completely reversed the proportions.

We suggest experimentation with green defaults to promote sustainable public procurement. For example, governments could direct that procuring agencies call for (or specify) exclusively sustainable products and services, with the option that *agencies* opt out if satisfactory products or services are unavailable (like the opt-out option of the Buy American Act when domestic products are unavailable (Buy American Act, § 8303(b)(3), 2022). At the same time, requiring the generation of additional documentation for opting out also serves as a disincentive for procurement officials. Similarly, requiring an approved eco-label or standard (see e.g., U.S. General Services Administration, n.d.) for framework agreements, e-catalogues, and other high-volume purchases of common or so-called "commercial" products or services, could serve as a valuable default, and yet grant purchasers an opt out.

With its 2018 "comply or explain" approach, the Danish Competition and Consumer Authority implemented a similar idea for social policies. The agency either must include internships in its

public contracts or publicly explain why it does not (Danish Competition and Consumer Authority, 2018). This comply or explain approach is traditionally used in corporate governance or financial supervision (see more on "regulatory shaming" in Yadin, 2019). If investors do not like the company's explanation, selling their shares constitutes a "market sanction" rather than a legal one. Like the Danish approach, procurement policies could combine the default with a shaming element: if the agency either does not craft a "green" tender or include sustainability clauses in its public contracts, the agency must publicly explain its deviation.

B. Deploying heuristics to accelerate sustainable procurement

Another common nudge involves social-proof heuristics, which are decisional shortcuts or mental rules-of-thumb that reduce time and cognitive effort (Cheung, 2017; Shah & Oppenheimer, 2008). For example, we tend to look at others' behavior as a reference for our own (Cheung, 2017; Cialdini, 2009). Studies analyzing people's (healthy versus unhealthy) food choices, for example, when shopping on an empty stomach (Cheung, 2017), demonstrate this "peer effect" heuristic. When participants observed others choose a healthy snack, they were more likely to follow suit (Burger et al., 2010; Prinsen et al., 2013; Salmon et al., 2014).

To nudge procurement agencies into more sustainable purchasing, they can be shown positive examples of towns, municipalities, and federal agencies that procured sustainably. The European Green Deal refers to this approach as "leading by example" (European Commission, 2019). Other than suggesting an electronic product passport, it does not further detail *how* public authorities should lead by example. As one possibility, the authors of this paper suggest that when a contracting authority places a tender in the procurement database, the database could display a pie chart of sustainable versus unsustainable tenders in the relevant sector. This nudge seems to be particularly promising when the pie chart references peers that traditionally have taken a pioneering role in a country—like Zurich or Bern in Switzerland, or the Department of Defense in the United States (which accounts for nearly two-thirds of U.S. federal procurement spending) (U.S. Government Accountability Office, 2021).

Similarly, advertising "green champions," private contractors that have delivered environmentally and socially sustainable services and products to the government (which, conceptually, is the opposite of blacklisting), could "nudge" more contractors to create sustainable solutions and submit offers that meet or exceed sustainable tender requirements.

6. Conclusion

Public procurement systems are best understood as complex outsourcing regimes, animated and constrained by complex webs of regulations. Unfortunately, in too many jurisdictions, public procurement officials have evolved into risk-averse and compliance-oriented bureaucrats and functionaries (Gordon, 2006; Kidalov et al., n.d.; but see Arena et al., 2018). Until governments reinvent their procurement laws and practice, and dramatically alter their priorities, the public procurement regimes and people that implement them will struggle to deploy the mass of government spending necessary to mitigate climate change's effects (Schooner & Speidel, 2020; Schooner & Matsuda, 2021). This article offers several alternatives and—primarily economic—policy tools to aid public procurement officials in combating the climate crisis until legislative and regulatory reforms come to fruition.

Rethinking the value proposition—focusing on life-cycle costs rather than low purchase prices—makes good business (and, frankly, common consumer) sense. Rethinking what matters in economics—focusing on outcomes rather than processes or prioritizing the public's quality of life

over firms' profit maximization—seems consistent with the purposes for governments' existence (Raworth, 2017). Exploiting the evolving research in behavioral economics suggests that harnessing the power of changing default behaviors and nudging officials in the right direction can pay enormous dividends. Stressing the importance of doing the right thing or focusing on what matters, rather than what is easy to measure, also seems like a worthwhile experiment.

We take heart from one of the small but significant successes of the U.S. government's 1990s acquisition reform movement, in which the following sentence was added to the Federal Acquisition Regulation (FAR)'s guiding principles: "In exercising initiative, Government members of the Acquisition Team may assume if a specific strategy, practice, policy or procedure is in the best interests of the Government and is not addressed in the FAR, nor prohibited by law (statute or case law), Executive Order or other regulation, that the strategy, practice, policy or procedure is a permissible exercise of authority" (FAR 1.102-4(e), 2022). That simple message continues to resonate today: if the rules don't prohibit integrating sustainability considerations into your acquisition planning, and you think it is in the best interest of the government customer and, more broadly, the public, then try it.

The climate crisis demands—at least as much as economic crises do—that governments (and our societies) change dramatically, evolve quickly, and experiment with innovative approaches. Public procurement expenditures—and, thus, public procurement policies—offer important opportunities to accelerate the necessary change (see e.g., Klingler a, 2020, suggesting making use of "expansionary procurement policies" to alleviate the negative consequences of recessions after the Covid pandemic). The enormous stakes and tremendous spending power of governments (what can be understood as the macroeconomic dimension of public procurement) demand that governments consider, experiment with, and implement new and innovative approaches. Fortunately, numerous potentially powerful economic policy tools are available. We encourage governments to try them.

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