



Procure Clean Fleets and Building Materials

This policy memo is part of Data for Progress and National Wildlife Federation’s Made Clean in America series, which features analysis and polling on federal investments to build American clean industrial capacity, tackle the climate crisis, and create high-quality manufacturing jobs.

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Background

The federal government procures, or purchases, hundreds of billions of dollars of goods each year, ranging from concrete for buildings to postal vans to vaccines. Decisions about which goods to purchase, how to do so, and at what scale can have a significant effect on domestic markets and manufacturing. Policymakers can leverage this “purchasing power” to drive decisions in the economy and pursue certain aims, like innovation in a particular supply chain or creation of certain types of jobs. By providing a definite source of demand, domestic procurement policies can encourage firms or entire sectors to ramp up research and development (R&D), investment, output, and employment, which might not occur in the absence of the government as a major buyer.

One common approach is to restrict procurement to domestic firms, with the goal being to ensure taxpayer dollars create domestic jobs and to shelter home-grown industries from foreign competition, at least until they can build the capacity to compete. In the U.S., these are referred to as Buy America(n) rules. The rapid industrial growth of the “Asian Tiger” economies (South Korea, Taiwan, Singapore, and

Hong Kong), for example, is often at least partially credited to government policies promoting local industry.

The government can also use its status as a major customer to direct the *types* of investment and R&D that domestic firms engage in by setting standards for the products it purchases. **Crucially, the government can do clean procurement, requiring or incentivizing manufactured goods to meet a certain carbon intensity to win a federal contract.** Clean procurement would address a key concern of the manufacturing sector in implementing clean technologies, particularly for traditionally high-emitting commodities, such as cement and steel. These industries are on the cusp of low-carbon breakthroughs. When coupled with Buy America or a carbon border adjustment mechanism, procurement can mitigate the risk that domestic investments would be undercut by foreign producers with laxer climate standards. And as more countries begin to enact their own green policies, like carbon prices, American firms will have built economies of scale through their experiences supplying the government, and be prepared to supply the world with clean energy and materials.

In other words, procurement should be seen as a tool for progressives interested in leveraging the government's power to steer the development of clean energy supply chains in the U.S., combat climate change, and promote U.S. manufacturing leadership.

Key policy options

Congress and the Biden-Harris Administration have several opportunities to leverage public purchasing power to induce growth of clean manufactured products. These include:

TRANSPARENCY AND DISCLOSURE. By incentivizing or requiring procurement to satisfy some emissions requirements, a clean procurement policy will naturally need to be paired with some auditing mechanism for ensuring that companies are meeting those requirements. The most commonly available and accepted tool for this in the industrial sector is the Environmental Product Declaration (EPD), but it takes resources to implement. Policy can incentivize firms to implement EPDs to better understand their supply chains and processes, which until now remain poorly understood (see Semiconductors).

Furthermore, this transparency will have extremely beneficial effects that will spillover across borders and to the private sector: one can expect an analogue of the so-called “Brussels Effect”, whereby regulatory decisions made by the European Union are taken up — both by other countries as their own regulations and by multinationals who do not want to deal with multiple regulatory standards. By requiring or incentivizing companies that supply the government to subject to transparency and auditing requirements *across* their (potentially cross-border) supply chains, other countries can also benefit from these transparency requirements.

In the private sector, there is increasing demand from investors, from retail to institutional, for “ethical investing.” The largest asset managers and investment funds now offer so-called ESG (environmental, social, and governance) funds that claim to be sustainable and ethical. However, much recent work has raised the question of exactly *how* the efficacy of these funds can be measured, and the lack of transparency and disclosure is cited as a key difficulty. By promoting transparency, the private sector

can benefit from the additional information and investors can meet their personal or institutional ESG goals.

CLEAN VEHICLE FLEET PROCUREMENT. The federal government, including DOD, USPS, and other agencies that operate large fleets, can transition to clean vehicles and thereby drive demand for clean vehicle manufacturing. The many federal agencies that run fleets are already required to report detailed emissions data to the Department of Energy. It would be straightforward to transition the fleet towards carbon neutrality, especially since the size of the fleets would help create national infrastructure for electric vehicles, including charging station networks and electrified ports.

GREEN MATERIALS PROCUREMENT. The federal government spends billions every year on a small set of infrastructure materials. Procurement of cement, concrete, steel, and other common materials used in buildings and infrastructure is a powerful tool for industrial decarbonization, but today the government does little to take environmental performance into account when making purchasing decisions. One option, known as “Buy Clean,” would impose a standard for embedded emissions of federally-purchased infrastructure materials, which ratchets down over time, eventually approaching zero. When coupled with Buy America provisions, this can also close the global “carbon loophole.” Buy Clean is on the books in California already, and other states may soon follow suit.

The federal government can also take steps to begin identifying products and materials it can purchase to boost demand for goods made with captured carbon. As Carbon180 reports in *Paving the Way for Low-Carbon Concrete: Recommendations for a Federal Procurement Strategy*, concrete made using anthropogenic carbon dioxide is a particularly promising opportunity. Concrete is the most used building material in the world, and carbon dioxide can be used both to create solid aggregate and to cure concrete. In other words, concrete can sequester carbon dioxide, permanently locking away emissions that would otherwise contribute to climate change. Federal and state demand for low-carbon concrete could help build a market and expand its availability and affordability to other customers. The bipartisan infrastructure bill provides a start by creating a grant program for state and local procurement of low-carbon goods within DOE’s Utilization Program.

COMPLEMENTARY DIRECT INVESTMENTS. To maximize the benefits of clean procurement and build political support, it will be important to enable domestic manufacturers to make the investments they need to retool their production processes. The manufacturing sector is capital-intensive, with long facility lifetimes and razor-thin margins. However, in contrast to vehicles or buildings, there is a relatively manageable set of high-emitting facilities that can be retrofitted, allowing retention of local jobs. Direct investments, such as grants and loans to capture carbon from cement production, retool automakers to produce electric vehicles, or upgrade blast furnaces, can help manufacturers begin the process of decarbonization and enable them to capture the benefit of low-carbon. A recent stakeholder letter articulated between \$15 and \$22 billion in direct investment needs through DOE.

MANUFACTURING GRANT INSTITUTIONS. The Morrill Acts of 1857 and 1890 created the system of land-grant universities, which were to focus on research especially in agricultural, manufacturing, and industrial fields, in light of rapidly changing economic realities of the Industrial Revolution. As globalization, automation, and the threat of climate change, bring forth a comparable period

of upheaval, an analogous system for meeting these demands seems necessary. By expanding, for example, the [Manufacturing USA network](#) of institutes, and by further focusing their efforts on *clean* manufacturing, the government can actively create a source for its clean procurement initiatives.

Clean manufacturing is certainly full of promising avenues for research — from improvements in the efficiency of computing infrastructure, to smarter electric grids for managing the fluctuations of cyclic renewable energy, to cleaner cement and building materials, there is great potential for producing world-leading technologies that will be in heavy-demand. By acting as an incubator for these ideas *and* as a market for products that can emerge, the government can help alleviate the fundamental challenge in technology policy of moving products from idea to market.

Polling

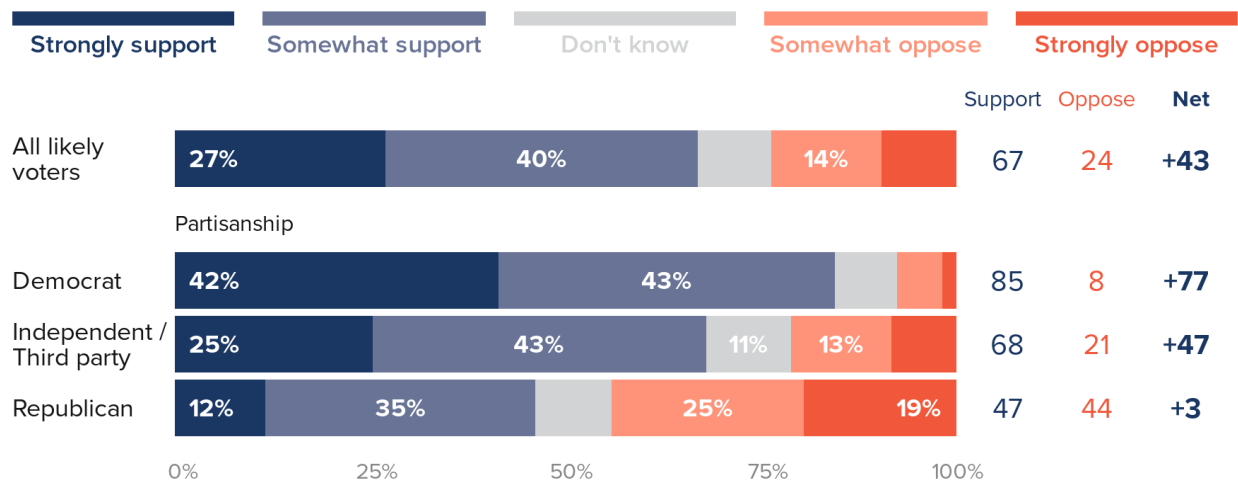
Voters widely support the federal government leveraging its immense purchasing power to catalyze domestic supply chains for clean vehicles and sustainable materials. Over two-thirds of likely voters (67 percent), including nearly all Democrats (85 percent), over two-thirds of Independents (68 percent), and a plurality of Republicans (47 percent) all support leveraging the federal procurement process to shore up domestic supply chains.

Voters Support Leveraging the Federal Procurement Process to Increase Domestic Production of Sustainable Goods

The federal government is one of the biggest purchasers in our economy.

Some lawmakers have proposed using the purchasing power of the federal government, also known as federal "procurement," to purchase clean vehicles and sustainable materials to kickstart domestic supply chains for these products.

Would you support or oppose the federal government using the procurement process to accelerate the domestic production of clean vehicles and sustainable materials?

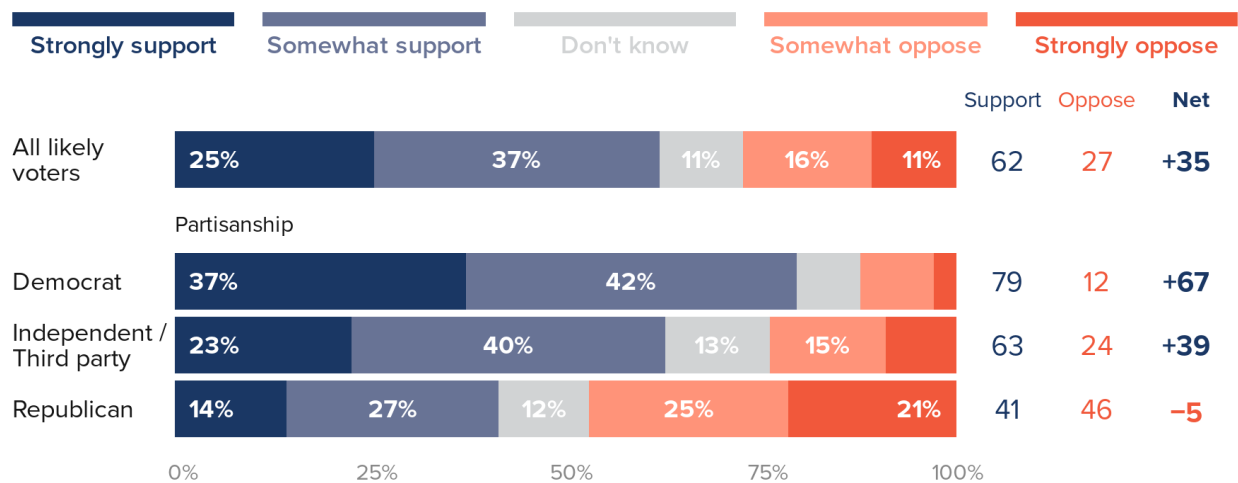


Additionally, a majority of voters (62 percent) support federal investments to increase transparency around embedded emissions. Over three-quarters of Democrats (79 percent) and a majority of Independents (63 percent) support this proposal to both reduce emissions and support domestic supply chains, while Republicans narrowly oppose it. However, 41 percent of Republicans support this measure, indicating potential for bipartisan collaboration around this proposal.

Voters Support Federal Investments to Increase Transparency Around Embedded Emissions

To better understand the emissions associated with the production of certain goods, or "embedded emissions," some lawmakers have proposed providing grants to manufacturers to help them disclose the embedded emissions associated with their products. They say this tracking can promote transparency so that the government better understands the climate impact of the goods they purchase and can make smarter decisions.

Would you support or oppose the federal government spending money to encourage manufacturers to disclose the embedded emissions in their products?



September 15–17, 2021 survey of 1,346 likely voters

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DATA FOR PROGRESS

From September 15 to 17, 2021, Data for Progress conducted a survey of 1,346 likely voters nationally using web panel respondents. The sample was weighted to be representative of likely voters by age, gender, education, race, and voting history. The survey was conducted in English. The margin of error is ±3 percentage points.