



## **Towards Fairer and More Competitive Fertilizer Markets**

*For the Hearing “Perspectives on the Fertilizer Industry: Ensuring a Stable and Affordable Supply for American Producers”  
before the U.S. Senate Committee on Agriculture, Nutrition, and Forestry*

Tuesday, May 12, 2026

**Andy Green**

Thank you for the opportunity to testify this afternoon. Center Market Strategies is a bipartisan advocacy and legal strategy firm dedicated to keeping markets fair and ensuring businesses of all sizes have a seat at the table.<sup>1</sup>

### **I. Why we are here**

We are here because the American farmer is hurting. According to an American Farm Bureau survey, fertilizer is so expensive that 70 percent of respondents say “they will not be able to buy all the fertilizer they need.”<sup>2</sup> The same survey noted worsening finances for nearly six in 10 farmers, driven by rising fertilizer and fuel costs during spring planting.<sup>3</sup> Even farmers who booked fertilizer long before the cost spikes of the

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<sup>1</sup> This testimony reflects the personal opinion of the author, and not necessarily that of Center Market Strategies or its clients.

<sup>2</sup> American Farm Bureau, “Fertilizer Supply and Affordability,” <https://www.fb.org/issue/fertilizer> (accessed May 8, 2026).

<sup>3</sup> American Farm Bureau, “Farm Bureau Survey Reveals Real Impact of Fertilizer Availability and Price,” April 14, 2026, <https://www.fb.org/market-intel/farm-bureau-survey-reveals-real-impact-of-fertilizer-availability-and-price>.

last few months bemoan the cost and lack of options. For more than five years, farmers have endured both price spikes and sustained higher prices, squeezing their margins and affecting their planting choices.<sup>4</sup> The reasons seem largely unconnected to the key underlying input prices or changes in demand. For example, from the end of 2020 to October 2021, anhydrous ammonia prices (AA) increased by \$688, with only 15 percent owing to the cost of embedded natural gas.<sup>5</sup> A similar spike occurred from April 2021 to 2022 (118 percent for AA)<sup>6</sup> and again recently (e.g., 52 percent for urea between February and April 2026<sup>7</sup>).

It is well known that fertilizer markets are highly concentrated. In nitrogen in the U.S., the four-firm concentration ratio was 77 percent as of 2018-2019, while for potash and phosphate it was 100 percent.<sup>8</sup> Fertilizer markets' tendency towards anticompetitive behavior is not a new problem,<sup>9</sup> and competition concerns were heightened before the most recent war.<sup>10</sup> In recent years, fertilizer prices increasingly

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<sup>4</sup> Joe L. Outlaw, Joe L. Outlaw, Bart L. Fischer, Henry L. Bryant, J. Marc Raulston, "Economic Impact of Nitrogen Prices on U.S. Corn Producers," Texas A&M University Agricultural and Food Policy Center, Dec. 2021, <https://fj-corp-pub.s3.us-east-2.amazonaws.com/inline-files/Economic%20Impact%20of%20Nitrogen%20Markets%20on%20U%20HB-1.pdf>.

<sup>5</sup> Outlaw, Fischer et al, 2021 at 10.

<sup>6</sup> Bart L. Fischer, Joe L. Outlaw, Henry L. Bryant, J. Marc Raulston, and George M. Knapek, "Concentration and Competition in the U.S. Fertilizer Industry," Texas A&M University, Agricultural and Food Policy Center, Briefing Paper 24-1, p. 5, Mar. 2024.

<sup>7</sup> Emily Gee, Kyle Ross, and Akshay Thyagarjan, "Trump's War May Be Over But the Economic Damage Is Not," Center for American Progress, April 8, 2026, Table 1, <https://www.americanprogress.org/article/trumps-war-may-be-over-but-the-economic-damage-is-not/>.

<sup>8</sup> Fischer, Outlaw et al, 2024 at 10.

<sup>9</sup> C. Robert Taylor and Diana L. Moss, "The Fertilizer Oligopoly: The Case for Global Antitrust Enforcement," AAI Working Paper No. 13-05, September 4, 2013, [https://www.competitivemarkets.com/wp-content/uploads/2013/09/WP13-5\\_Fertilizer\\_Body.pdf](https://www.competitivemarkets.com/wp-content/uploads/2013/09/WP13-5_Fertilizer_Body.pdf).

<sup>10</sup> See Dr. Diana Moss, "Pressure Cooker: Competition Issues in the Seed & Fertilizer Industries," Progressive Policy Institute, Testimony Before the United States Senate Committee on the Judiciary, October 28, 2025, [https://www.progressivepolicy.org/wp-content/uploads/2025/10/Moss\\_SJC-Hearing\\_Seeds-Fertilizer\\_10.28.25.pdf](https://www.progressivepolicy.org/wp-content/uploads/2025/10/Moss_SJC-Hearing_Seeds-Fertilizer_10.28.25.pdf).

track corn prices. While there may be some reasons for that owing to a reach for yield or opportunities to switch crops or otherwise lower fertilizer use, the trend is so pronounced as to raise significant questions about prices more reflect the exercise of fertilizer companies' market power, rather than the supply and demand for fertilizer and the costs of inputs.<sup>11</sup>

Farmers are suffering from concentration bottlenecks across the sectors that serve them. Whether it's high prices and few choices for farm equipment or seeds, or limited choices and low prices for markets they sell into, farmers big and small are acutely aware of how a forty-year trend towards concentration and the maximization of short-term efficiency targets leaves them increasingly powerless. In commodity markets where margins are thin and additional revenue streams are less available today than even a few years ago, bringing the next generation back to the farm is harder and harder to pencil out, an economic impact which verberates across rural America.<sup>12</sup>

Fair and competitive markets are an important part of ensuring a stable and affordable supply of fertilizer for America's agricultural producers. Unfortunately, market competition requires marketcraft—the work of legislators, regulators, and enforcers to balance against the asymmetries, distortions, risks, abuses, and, sometimes, criminality and reinforce markets in favor of openness, fairness, and effective competition.<sup>13</sup>

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<sup>11</sup> Fischer, Outlaw, et al, 2024.

<sup>12</sup> See remarks by Secretary Thomas Vilsack, "Increasing Competition and Fairness in Food and Agriculture," Center for American Progress, June 25, 2024, <https://www.americanprogress.org/events/increasing-competition-and-fairness-in-agricultural-markets/>.

<sup>13</sup> Steven K. Vogel, *Marketcraft: How Government Makes Markets Work* (2018). See also <https://www.law.nyu.edu/sites/default/files/Vogel%20Steven%20-%20The%20Marketcraft%20Solution.pdf>.

To illustrate pathways for this Committee to achieve that goal, first, I will offer some pillars of marketcraft as it relates to fair and competitive markets generally. For each, I will apply those principles to some of the challenges in fertilizer.

## **II. Competition Marketcraft for Fertilizer Markets**

So what are pillars of marketcraft in favor of fair and competitive fertilizer markets? In my view, they would be (i) policing abusive conduct and remedying problematic market structures, (ii) transparency, (iii) investing in competition and resiliency, (iv) aligning consumer markets with farmers' interests in competition, and (v) research. Acknowledging that fertilizer is different from other concentrated sectors of agriculture, such as livestock and poultry, seeds, or tractors, still there are principles to be recognized from past experience in other parts of the agricultural sector, as well as other markets. Since my background is in financial regulation, I will draw some examples from there.

### **A. Police abusive conduct and remedy problematic market structures**

First, antitrust and unfair practices laws are needed to police the exercise of market power and other marketplace abuses. Enforcement is vital to ensuring that market structures are open for competitive entry and to prevent abuses against other market participants. Whether these are horizontal forms of conduct that stifle competition and new business opportunity, or vertical conduct that takes advantage of power asymmetries that unfairly extract from consumers (downstream) or from producers (upstream), or some combination of the two, fair and competitive markets need to be policed. When problematic conduct or market structures emerge, remedies appropriate to preventing the recurrence of the violations need to be applied.

Illegal conduct is easier to execute in highly concentrated markets. I am pleased to see this Administration has prioritized investigations in agricultural competition around both agricultural inputs<sup>14</sup> and cattle markets.<sup>15</sup> I hope the efforts yield fruit, and would be pleased if they were building on the groundwork laid out previously in fertilizer,<sup>16</sup> seeds,<sup>17</sup> and cattle.<sup>18</sup> These efforts benefit from the enforcement efforts in 2022<sup>19</sup> and 2023<sup>20</sup> to address problematic practices in the poultry industry and the

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<sup>14</sup> Department of Justice, “Justice Department and USDA Coordinate to Protect Competition in Agricultural Inputs,” Sept. 29, 2025, <https://www.justice.gov/opa/pr/justice-department-and-usda-coordinate-protect-competition-agricultural-inputs>.

<sup>15</sup> C-SPAN, “Acting Attorney General and Administration Officials Announce Antitrust Investigation of Meat Packers,” May 4, 2026, <https://www.c-span.org/program/news-conference/acting-attorney-general-and-administration-officials-announce-antitrust-investigation-of-meat-packers/678528>.

<sup>16</sup> USDA, Agricultural Marketing Service, Access to Fertilizer: Competition and Supply Chain Concerns, January 2022, 87 FR 15191.

<sup>17</sup> USDA, Agricultural Marketing Service, “Competition and the Intellectual Property System: Seeds and Other Agricultural Inputs,” Jan. 2022, 87 FR 15198; USDA, Agricultural Marketing Service, “USDA Launches Interagency Working Group on Competition and Intellectual Property in Seeds,” March 23, 2023, <https://www.ams.usda.gov/press-release/usda-launches-interagency-working-group-competition-and-intellectual-property-seeds>.

<sup>18</sup> USDA, Agricultural Marketing Service, “Price Discovery and Competition in Markets for Fed Cattle,” Oct. 2024, 89 FR 82519, <https://www.federalregister.gov/documents/2024/10/11/2024-23528/price-discovery-and-competition-in-markets-for-fed-cattle>.

<sup>19</sup> Then, the Department of Justice’s (DOJ) Antitrust Division (ATR), in partnership with USDA’s Agricultural Marketing Service, settled cases against several poultry processors. In *Wayne-Sanderson*, growers secured relief from deceptive practices associated with the “tournament system,” which pits chicken growers against each other to determine their compensation. U.S. Department of Justice, “Justice Department Files Lawsuit and Proposed Consent Decrees to End Long-Running Conspiracy to Suppress Worker Pay at Poultry Processing Plants and Address Deceptive Abuses Against Poultry Growers,” July 2022, <https://www.justice.gov/archives/opa/pr/justice-department-files-lawsuit-and-proposed-consent-decrees-end-long-running-conspiracy>.

<sup>20</sup> In *Koch Foods*, the government established deterrence against poultry processors’ anticompetitively and unfairly requiring chicken growers to pay a termination penalty to switch to a rival chicken processor. U.S. Department of Justice, “Justice Department Files Lawsuit and Proposed Consent Decree to Prohibit Koch Foods from Imposing Unfair and Anticompetitive Termination Penalties in Contracts with Chicken Growers,” Nov. 2023, <https://www.justice.gov/archives/opa/pr/justice-department-files-lawsuit-and-proposed-consent-decree-prohibit-koch-foods-imposing>.

rulemaking efforts to ensure consistency and clarity across the relevant sector.<sup>21 22</sup> The recent settlement of the agricultural data provider case is an important case in point.<sup>23</sup> Fully and effectively enforcing the law is, of course, essential, and that should include the fullest range of antitrust and unfair, deceptive, and unjustly discriminatory authorities. If and when a case proceeds, the remedy must be vigorous enough to address the underlying market power and incentives for abusive conduct.

To that end, it may be appropriate to reconsider recent mergers that have helped form this highly concentrated sector. While the trend towards concentration began forty years ago, several important fertilizer mergers occurred within the last 15 or so years which deserve careful scrutiny. In particular, the 2018 merger of Agricultural Fertilizer Manufacturers Agrium and PotashCorp resulted in a company that controlled 60 percent of potash capacity and 30 percent of nitrogen and phosphate. Antitrust agencies can unwind mergers at any time, and retrospective reviews are useful tools to establish the economic evidence for doing so.<sup>24</sup>

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<sup>21</sup> The legal principles in the *Wayne-Sanderson* case was reflected in the rulemaking that applied across the broiler chicken industry to protect growers from excessive variability in compensation, as well as in inputs and production practices and additional capital investments. Poultry Grower Payment Systems and Capital Improvement Systems, Jan. 2025, <https://www.federalregister.gov/documents/2025/01/16/2025-00508/poultry-grower-payment-systems-and-capital-improvement-systems>.

<sup>22</sup> The principle of *Koch Foods* against poultry noncompete penalties was reflected, along with other non-discrimination and anti-retaliation principles, in an earlier rulemaking. Inclusive Competition and Market Integrity under the Packers and Stockyards Act, March 2024, 89 FR 16092.

<sup>23</sup> U.S. Department of Justice, “Justice Department Requires Agri Stats to End Exchange of Competitively Sensitive Information Among Nation’s Largest Meat Processors that Suppressed Competition and Increased Prices for Decades,” May 7, 2026, <https://www.justice.gov/opa/pr/justice-department-requires-agri-stats-end-exchange-competitively-sensitive-information>.

<sup>24</sup> John Kwoka and Marc Jarsulic, “Evidence-Based Policy in Antitrust: The Need for Ongoing Merger Retrospectives,” *Promarket*, April 20, 2017, <https://www.promarket.org/2017/04/20/evidence-based-policy-antitrust-need-ongoing-merger-retrospectives/>.

Interestingly, the Federal Trade Commission conducted a retrospective analysis in 2020 and found that the merger did not result in higher prices.<sup>25</sup> That puzzling conclusion occurred before the extraordinary price spikes which characterized pandemic-driven inflation, the Ukraine War, and more recent turmoil in the Middle East. It would seem appropriate for the FTC to carefully reevaluate that merger, as farmers have reported, at least anecdotally, that they felt a shift in pricing in the market beginning in 2018. Data from the combined company's gross margin potash segment shows a 31 percent increase from 2024 to 2025 and a 34 percent increase for nitrogen.<sup>26</sup>

Other companies show jumps in gross margin in recent years, for example one company went from an average gross margin of approximately 23 percent between 2015 and 2017<sup>27</sup> to an average gross margin closer to 45 percent between 2022 and 2025.<sup>28</sup> Profits across multiple companies have shown strong increases for years—in several cases, reportedly upwards of 1500 percent, 1000 percent, and 400 percent for

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<sup>25</sup> Nicholas Kreisle, "Price Effects from the Merger of Agricultural Fertilizer Manufacturers Agrium and PotashCorp," Federal Trade Commission, WORKING PAPER NO. 345, July 2020, [https://www.ftc.gov/system/files/documents/reports/price-effects-merger-agricultural-fertilizer-manufacturers-agrium-potashcorp/working\\_paper\\_345.pdf](https://www.ftc.gov/system/files/documents/reports/price-effects-merger-agricultural-fertilizer-manufacturers-agrium-potashcorp/working_paper_345.pdf).

<sup>26</sup> Nutrien, 2025 Management's Discussion and Analysis, Ex. 99-2 to Securities and Exchange Commission Form 40-F, for year ending Dec. 31, 2025, p. 37, 39, <https://www.sec.gov/Archives/edgar/data/1725964/000119312526081326/d56746dex992.htm> (Note, other segments, such as retail and phosphate, showed no change, or a modestly negative change, in gross margin year on year,).

<sup>27</sup> CF Holdings, Form 10-K, Securities and Exchange Commission, for year ending Dec. 31, 2017, p. 40 <https://d18rn0p25nwr6d.cloudfront.net/CIK-0001324404/065fec71-1fd6-4eef-8962-2900418dbe89.pdf>;

<sup>28</sup> CF Holdings, Form 10-K, Securities and Exchange Commission, for year ending Dec. 31, 2023, p. 39, <https://d18rn0p25nwr6d.cloudfront.net/CIK-0001324404/3376e88f-d1f4-4fb9-8187-376109919f03.pdf>.

three companies from 2020 to 2022.<sup>29</sup> Where there is smoke, particularly in supranormal profits, antitrust enforcers should look for fire.<sup>30</sup>

Several other industry mergers occurred in 2010, 2013, and 2015, among other years. More recently, the acquisition of a publicly supported fertilizer option by one of four largest companies is especially troubling.<sup>31</sup> Companies themselves have to acknowledge the risks of concentration in the sector, and the reliance of the industry on this troubling trend.<sup>32</sup>

Countering those pressures will be challenging but important. Depending on what the DOJ finds in its investigation, it may be appropriate to consider concentration caps or other tools to bring the market structure more in line with competitive principles. President Trump has criticized price gouging in the fertilizer sector.<sup>33</sup> Tools such as the

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<sup>29</sup> Noah Zahn, “The cost of growth: Fertilizer companies cash in while farmers and communities struggle,” *Investigate Midwest*, June 26, 2023, <https://investigatamidwest.org/2023/06/26/the-cost-of-growth-fertilizer-companies-cash-in-while-farmers-and-communities-struggle/>; Sarah Carden, “Big Fertilizer: Measuring the Impacts of Food and Farm System Concentration,” *Farm Action*, Jan. 19, 2022, <https://farmaction.us/wp-content/uploads/2022/01/Big-Fertilizer-Measuring-the-Impacts-of-Food-and-Farm-System-Concentration.pdf>.

<sup>30</sup> Marc Jarsulic, Andrew Schwarz, Ethan Gurwitz, “Toward a Robust Competition Policy,” Center for American Progress, 2019, <https://www.americanprogress.org/article/toward-robust-competition-policy/> (highlighting heightened Tobin’s Q returns on equity as indications of the existence of competitive moats preventing the competing away of supranormal profits).

<sup>31</sup> Donnelle Eller, “OCI Global sells Iowa Fertilizer Co. plant to Koch Industries for \$3.6 billion,” *Des Moines Register*, Dec. 19, 2023, <https://www.desmoinesregister.com/story/money/agriculture/2023/12/19/oci-global-sells-iowa-fertilizer-to-koch-industries-for-3-6-billion-wever-plan/71970202007/?gnt-cfr=1&gca-cat=p&gca-uir=false&gca-epti=z116647u116547e113050v116647&gca-ft=164&gca-ds=sophi>; see also “Iowa Fertilizer Deal,” *Politico*, Jan. 16, 2024, <https://www.politico.com/newsletters/weekly-agriculture/2024/01/16/march-cr-plan-puts-farm-bill-at-risk-00135696>.

<sup>32</sup> The Mosaic Company, Form 10-K, Securities and Exchange Commission, for year ending Dec. 31, 2025, p. 25, [https://s1.q4cdn.com/823038994/files/doc\\_downloads/2026/04/MOS-2025-12-31-10K-Updated.pdf](https://s1.q4cdn.com/823038994/files/doc_downloads/2026/04/MOS-2025-12-31-10K-Updated.pdf).

<sup>33</sup> “The United States will not accept PRICE GOUGING from the fertilizer monopoly! American Farmers, we have your back!”, posted on Truth Social, as reported in Marcia Brown, “Rollins weighs reviving Biden-era domestic fertilizer program,” *Politico*, April 22, 2026,

ability to reject prices unless they are “just, reasonable, and nondiscriminatory” could be a way to effectuate the goal and limit the divergence of prices from supply and demand for the product and its inputs.<sup>34</sup> Additionally, I have long been in favor of simple concentration limits, such as those which have been utilized in the financial markets.<sup>35</sup>

Effective enforcement of the law requires funding and staffing at agencies, including lawyers and economists. I fear that the recent loss of honest, hardworking, often farm-kid civil servants hurts poultry farmers when, for example, investigators are needed to examine whether growers’ investments in poultry houses are fully recouped if processing plants close.<sup>36</sup>

## **B. Transparency**

As described by Louis Brandeis – the architect of the Federal Trade Commission and later the Securities and Exchange Commission – sunlight is the best disinfectant and the electric light the most efficient policeman.<sup>37</sup> Frequent information reporting is the lifeblood of the capital markets and enables investors to allocate capital efficiently, delivering growth for the economy and returns for savers. Public company transparency also benefits the public at large, including farmers and farm risk analysts. The capital markets have all sorts of other examples of how transparency is a powerful tool for changing problematic behavior: from the inspections reports and disclosures that the

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<https://www.politico.com/news/2026/04/23/rollins-weighs-reviving-biden-era-domestic-fertilizer-program-00887993?shem=d sdf,sharefoc,agadiscover s dl,sh/x/discover/m1/4>.

<sup>34</sup> See, e.g., 7 USC 206.

<sup>35</sup> See a concentration cap proposal as applied to meat processing, at C.Z. Willingham and A. Green, “A Fair Deal for Farmers,” Center for American Progress, (2019), <https://www.americanprogress.org/article/fair-deal-farmers/>.

<sup>36</sup> See, e.g., John McCracken, “USDA’s Tyson Foods investigation collected thousands of documents”, *Missouri Independent*, Dec. 20, 2024, <https://missouriindependent.com/2024/12/20/usdas-investigation-into-tyson-foods-has-collected-thousands-of-documents-would-donald-trump-end-it/>.

<sup>37</sup> Louis Brandeis, *Other People’s Money and How Bankers Use it* (1914).

PCAOB has used to uphold audit quality expectations of auditors since the Sarbanes-Oxley Act reforms, to the bond market trading disclosures under what's called the TRACE system at FINRA that brought down high fees for bond trading.

Transparency is also a fundamental tenet for competitive marketplace design in agriculture. USDA deployed this principle in its transparency rulemaking to enhance poultry growers' decision-making power and address deceptive practices in their contracting and tournaments, as well as around tournament base prices, additional capital investments, and other aspects.<sup>38</sup> This committee is familiar with the benefits of the Livestock Mandatory Reporting Act's Market News reporting, as provided by the USDA Agricultural Marketing Service. It helps ordinary producers have a much better grasp of the entire market, which otherwise would be locked up by the biggest industry players and high-cost data providers.

More specifically, only a couple of years ago, the Cattle Contract Library pilot required reporting by covered packers of any financing, risk-sharing, or profit-sharing terms in their long-term contracts. This has long been the focus of concern for smaller players in the industry. AMS publicly confirmed in October 2024 that upon launch in January 2023 and to that date – no contracts have been reported with those specifications.<sup>39</sup> As those specifications continue not to be listed, transparency either

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<sup>38</sup> USDA, Agricultural Marketing Service, "Transparency in Poultry Grower Contracting and Tournaments," Nov. 2023, 88 FR 83210, <https://www.federalregister.gov/documents/2023/11/28/2023-24922/transparency-in-poultry-grower-contracting-and-tournaments>; Agricultural Marketing Service, "Poultry Grower Payment Systems and Capital Improvement Systems," Jan. 2025, 90 FR 5146, <https://www.federalregister.gov/documents/2025/01/16/2025-00508/poultry-grower-payment-systems-and-capital-improvement-systems>.

<sup>39</sup> 89 FR 82519, 82522. The term would be reported in the "Contract Specs" list in the Summary Dashboard, available here: [https://mymarketnews.ams.usda.gov/visualizations/lpgmn/cattle\\_contract\\_library](https://mymarketnews.ams.usda.gov/visualizations/lpgmn/cattle_contract_library).

has helped clean up the market or has helped clarify that those terms are not relevant to the debate over unduly preferential pricing.<sup>40</sup>

More transparency would be beneficial for a more accountable fertilizer market. First, public company disclosure is an important tool. Disclosure of gross margin percentages, for example, and capacity utilization rates are valuable for both investors and farmers. Robust disclosure in the public company markets should be retained, enhanced, and expanded, for the benefit of both investors and risk management overall in the economy.

Second, kudos to the bipartisan sponsors of legislation to enhance USDA's role in providing additional transparency through its toolkit, in particular S. 4152, the Fertilizer Transparency Act of 2026.<sup>41</sup> The legislation looks to build on the Agricultural Marketing Service's track record of success under the Livestock Mandatory Reporting Act and the Cattle Contract Library Pilot. It offers a pathway, carefully designed, that can help level the playing field between farmers managing their risks and the larger fertilizer market participants, which already have access to expensive data providers. Also, public reporting can highlight, and in some cases deter, trends—for example, where there is a disconnect between price and underlying supply and demand. In that way, transparency can lead to beneficial outcomes for farmers even beyond their use of the information itself. I commend the legislation for its use of modern dashboards. The bill also appropriately preserves the ability for the data to be used for enforcement purposes.<sup>42</sup> This is important, as regulators will need to keep an eye both on data

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<sup>40</sup> To uphold the integrity of reporting, AMS maintains an audit function over its LMR Act Market News program.

<sup>41</sup> <https://www.congress.gov/bill/119th-congress/senate-bill/4152>

<sup>42</sup> On the importance of that, see Government Accountability Office, "U.S. Department of Agriculture: Additional Data Analysis Could Enhance Monitoring of U.S. Cattle Market,"

inputs into the benchmark and the use of the benchmark to guard against manipulation.<sup>43</sup>

### **C. Invest in Competition and Resiliency**

Third, investment is an important tool for enhancing competitive markets. Investing in competition is integral to ensuring critical supply chains, such as chips production or vital prescription drugs, are present domestically. That was also the principle behind the range of industrial policy investments USDA made post-pandemic to enhance the resiliency and competitiveness of agricultural supply chains, thanks to the American Rescue Plan and in some cases the Commodity Credit Corporation.<sup>44</sup> Investment should be designed to bring the private sector into the area. Where there is insufficient competition, tools can limit downside risks and fill critical capital stack holes so as to enable the private sector to overcome hurdles to investing. The reality is that investors and entrepreneurs often have horizons for returns or risk tolerances that can be too short and too low, respectively, especially in already highly concentrated markets where economic retaliation is a risk.<sup>45</sup>

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GAO-18-296, Apr 10, 2018, <https://www.gao.gov/products/gao-18-296>.

<sup>43</sup> Gina-Gail S. Fletcher, "Benchmark Regulation," 102 *Iowa Law Review* 1929-1982 (2017), [https://scholarship.law.duke.edu/faculty\\_scholarship/4014/](https://scholarship.law.duke.edu/faculty_scholarship/4014/).

<sup>44</sup> USDA, "Agri-Food Supply Chains Assessment," 2022, <https://www.ams.usda.gov/sites/default/files/media/USDAAgriFoodSupplyChainReport.pdf>; USDA, "USDA Announces Framework for Shoring Up the Food Supply Chain and Transforming the Food System to Be Fairer, More Competitive, More Resilient," Jun. 2022, <https://www.usda.gov/about-usda/news/press-releases/2022/06/01/usda-announces-framework-shoring-food-supply-chain-and-transforming-food-system-be-fairer-more>; see also Jeff Stein and Laura Reiley, "In latest effort to combat rising prices, White House to offer \$1 billion in aid for smaller meat-industry producers," *The Washington Post*, Jan. 2022, <https://www.washingtonpost.com/us-policy/2022/01/03/white-house-beef-supply/>.

<sup>45</sup> See, e.g., Nadia Schadlow, "Reindustrialization: A Strategy for American Sovereignty and Security," Hudson Institute, Dec. 2024, <https://www.hudson.org/national-security-defense/reindustrialization-strategy-american-sovereignty-security-nadia-schadlow>; Todd Tucker, "Industrial Policy and Planning: What It Is and How to Do It Better," Roosevelt Institute, July 30, 2019, <https://rooseveltinstitute.org/publications/industrial-policy-and-planning/>.

The Fertilizer Production Expansion Program (FPEP) was USDA’s investment program to support American-made, sustainable fertilizer capacity in the face of sharply rising prices and long-term trends towards high levels of concentration. The Administration committed \$900 million from the Commodity Credit Corporation (CCC) in a program intentionally designed to promote competitive alternatives to the existing suppliers, and thus to expand choice for farmers and support rural economic development in places that needed it.<sup>46</sup> Specifically, the program prohibited any of the four largest companies in a sector by market share from participating, including in manufacturing, processing, or distribution, for any of the nitrogen, phosphate, or potash, or any combination of the three.<sup>47</sup>

Over the course of three years, FPEP invested over \$778 million in more than 100 projects across 39 states.<sup>48</sup> That adds up to an estimated 12 million tons of new production online and more than 1,500 jobs.<sup>49</sup> Examples of specific projects are available here.<sup>50</sup> More than \$100 million remains available to the program. According to

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<sup>46</sup> USDA, “Biden-Harris Administration Makes \$500 Million Available to Increase Innovative American-Made Fertilizer Production,” Sept. 27, 2022, <https://www.usda.gov/about-usda/news/press-releases/2022/09/27/biden-harris-administration-makes-500-million-available-increase-innovative-american-made-fertilizer>; USDA, “USDA Makes Investments to Strengthen American Farms and Businesses, Increase Competition and Lower Costs,” Dec. 18, 2024, <https://www.usda.gov/about-usda/news/press-releases/2024/12/18/usda-makes-investments-strengthen-american-farms-and-businesses-increase-competition-and-lower-costs>.

<sup>47</sup> USDA, Rural Development, Fertilizer Production Expansion Program (FPEP) Grant Application Requirements, presentation on October 6, 2022, [https://www.rd.usda.gov/sites/default/files/Training\\_FPEPApplicationRequirements.pdf](https://www.rd.usda.gov/sites/default/files/Training_FPEPApplicationRequirements.pdf) (funding opportunity RD-RBS-22-01-FPEP).

<sup>48</sup> <https://www.usaspending.gov/>

<sup>49</sup> Calculations based on total from <https://www.usaspending.gov/> and data cited in USDA, “USDA Makes Investments to Strengthen American Farms and Businesses, Increase Competition and Lower Costs,” Dec. 18, 2024, <https://www.usda.gov/about-usda/news/press-releases/2024/12/18/usda-makes-investments-strengthen-american-farms-and-businesses-increase-competition-and-lower-costs>.

<sup>50</sup> For example, <https://www.rd.usda.gov/media/file/download/usda-rd-fpep-fy25-12172024.pdf>. Also, Rural Development’s Rural Data Gateway, <https://www.rd.usda.gov/rural-data-gateway>.

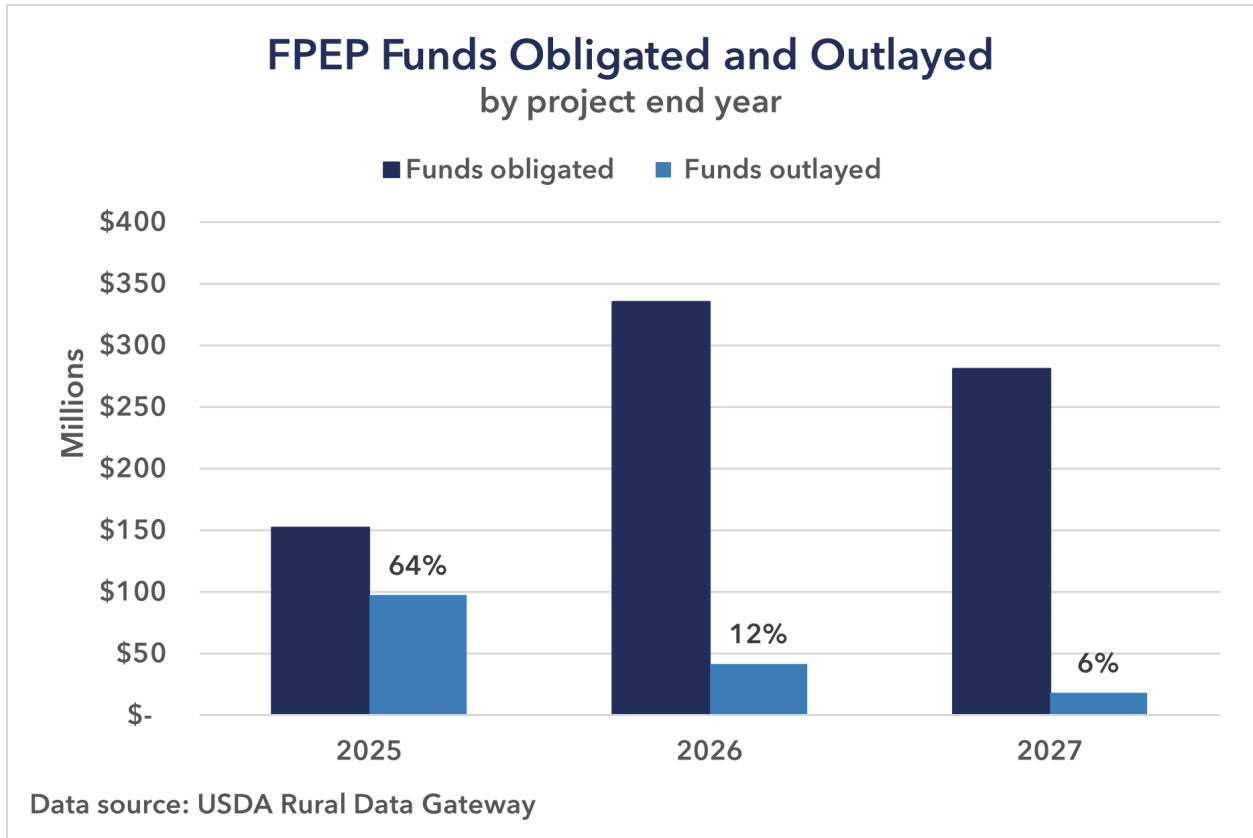
Treasury Department data, there is more than \$10 billion in the CCC (even keeping a reserve) from which the Administration could use even a modest amount to restart and expand the FPEP program.<sup>51</sup>

Some FPEP projects have spent all or most of their funds.<sup>52</sup> For projects that have spent 90 percent or more, those obligations totaled approximately \$88 million. For projects that have spent 50 to 90 percent, those obligations totaled nearly \$70 million. However, many projects have not seen large amounts of outlays (actual payments against obligated grant dollars). For projects that have only drawn outlays between 10 percent and 50 percent, their obligations totaled slightly more than \$70 million. Projects where zero dollars have been outlayed reflect obligations of over \$460 million. The following chart shows outlays organized by the target end year for the project.

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<sup>51</sup> Treasury Direct, Commodity Credit Corporation, 012X4336, <https://www.treasurydirect.gov/govt/reports/tbp/borrowings-transaction-query/report.html>.

<sup>52</sup> Rural Development's Rural Data Gateway, <https://www.rd.usda.gov/rural-data-gateway>



At a minimum, expanding capacity is important. Larger fertilizer companies, as with other capital intensive businesses, face often financial market pressures to run at or near capacity. This can leave little space in the system to adjust in the face of shocks.<sup>53</sup>

As a corollary, it is important to enhance institutional resources that support investment in supply chain resiliency and rural economic vitality, such as FPEP. For many years, USDA Rural Development’s Rural Cooperative and Business Services has provided the know-how for investments that require Federal lending and loan guarantee authority, as well as support for farmers seeking to operate cooperatives. The Agricultural Marketing Service is also a vital resource in partnering with local institutions

<sup>53</sup> See, e.g., CF Industries, “Key Questions About Fertilizer and Its Price Answered,” March 27, 2026, Q4.

to provide grants, technical assistance, and data that support competitive local agricultural markets and rural economic vitality.

#### **D. Align the Consumer Market with Competition**

Fourth, consumers can support pro-competition incentives upstream for farmers. The starting point is to serve the consumer with truth. Clear labels for consumers also help producers because producers that actually do the hard work of consumer-desirable practices should get their rewards. That was the principle behind the Biden Administration’s alignment of “Product of USA” as born, raised, harvested, and processed in the USA, with the work begun under the first Trump Administration’s Federal Trade Commission around “Made in USA.”<sup>54</sup> The same principle applied to efforts to enhance sustainability and no-antibiotics labels.<sup>55</sup>

In fertilizer, opportunities exist to align America’s desire for healthy food and a clean environment, with competition and resiliency in fertilizer. Expanding the options for farmers can also be useful. For example, greater reliance on biofertilizer, livestock on the land, and other practices to shift towards profitability maximization, may be appropriate for many farmers.<sup>56</sup> One study suggests that nutrient recycling is capable of

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<sup>54</sup> USDA, “USDA Finalizes Voluntary “Product of USA” Label Claim to Enhance Consumer Protection,” March 2024, <https://www.usda.gov/about-usda/news/press-releases/2024/03/11/usda-finalizes-voluntary-product-usa-label-claim-enhance-consumer-protection>.

<sup>55</sup> USDA, “USDA Releases Updated Guideline to Strengthen Substantiation of Animal-Raising and Environment-Related Claims on Meat and Poultry Labels,” Aug. 2024, <https://www.usda.gov/about-usda/news/press-releases/2024/08/28/usda-releases-updated-guideline-strengthen-substantiation-animal-raising-and-environment-related>.

<sup>56</sup> Devault, M., Woolf, D. & Lehmann, J., “Nutrient recycling potential of excreta for global crop and grassland production,” *Nat Sustain*, 8, 99–111 (2025). <https://doi.org/10.1038/s41893-024-01467-8>. See also, National Farmers Union, “Nitrogen Fertilizer: Critical Nutrient, Key Farm Input, and Major Environmental Problem,” Aug. 30, 2022, <https://www.nfu.ca/wp-content/uploads/2022/08/nitrogen-fertilizer-report-nfu-2022-en.pdf>.

meeting approximately 13 percent of crop nutrient needs.<sup>57</sup> Enforcing the truthfulness of label claims is important to prevent fraud that takes money out of the pockets of farmers who have invested in enhanced production practices.

### **E. Research**

Economic research and academic legal analysis are foundational aspects of building and maintaining effective market competition. They are vital for enforcement matters and rulemaking, and also serve critical functions in helping market participants and policymakers identify trends and design remedies to restore market competitiveness. Government investments in objective, unbiased research, such as through the Land Grant University system, and through other institutes and studies, are only more important, as many academic and research institutions increasingly rely on either corporate sponsorships or philanthropic foundations which can have slants to their research agendas. The AMS Transportation Division is a fantastic example of how investments in research and market expertise can yield information and regulatory benefits for farmers and agricultural shippers generally.

One underappreciated aspect of the USDA Agricultural Competition Partnership with the State Attorneys General, since cancelled, was how those funds were designed to enable more than 30 bipartisan state attorneys general offices to engage academics, often at their local research universities. Those studies can undergird more effective state-led antitrust enforcement and also analyze the feasibility of innovative, market-driven pilot programs. The Biden USDA also directly invested in competition studies—for example, a study through a Land Grant university in a major cattle state of

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<sup>57</sup> See, e.g., National Farmers Union, “Nitrogen Fertilizer: Critical Nutrient, Key Farm Input, and Major Environmental Problem,” Aug. 30, 2022, <https://www.nfu.ca/wp-content/uploads/2022/08/nitrogen-fertilizer-report-nfu-2022-en.pdf>.

the possibility of exchange trading to help set base prices for certain grades of cattle in markets where cash negotiation was otherwise constrained and where producers could maintain access to their preferred grid.

Research into seed resiliency is also important to improve fertilizer efficiency. To that end, the Agricultural Research Service's National Plant Germplasm System (NPGS) seed bank undergirds public *and* private company research, for example on adaptable varieties that can grow in different regions and changing climates. Congress should invest in revitalizing the NPGS, which is in need of infrastructure upgrades and staff to avoid the loss of irreplaceable heirloom seed, including in corn.<sup>58</sup> Congress has been sensible to fund agricultural economic research centers, and should expand and enhance their and other research institutions' ability to focus on key competition challenges. The AMS Seed Liaison project emerged out of a similar partnership with Land Grant university expertise.

### **III. Conclusion**

Farmers and rural communities deserve the chance to compete based on hard work, smart investments, and nature's abundance. Market competition is a vital pillar to allow that to occur. But sustaining fair and competitive markets takes hard work by policymakers too. I am pleased to see the seriousness with which this Committee approaches the topic before us and also the continuing bipartisan dedication across multiple Administrations. More can and should be done.

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<sup>58</sup> See, generally, USDA, Agricultural Research Service, National Plant Germplasm System (NPGS) Plan, <https://www.ars.usda.gov/crop-production-and-protection/plant-genetic-resources-genomics-and-genetic-improvement/docs/npgs-plan/> (accessed May 8, 2026).