



The PROVE IT Act's Carbon Tariffs' Threats to U.S. Agriculture

by Dave Juday

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A plan to impose a wide array of carbon tariffs is working its way through Congress. Earlier this year the Senate Committee on Environment and Public Works passed by a wide 15-4 bipartisan vote The Providing Reliable, Objective, Verifiable Emissions Intensity and Transparency (PROVE IT) Act. A companion bill was just introduced in the House of Representatives with 20 co-sponsors. U.S. agriculture should consider this legislation a serious threat.

The bill would authorize the U.S. Department of Energy (DOE) to conduct a carbon intensity analysis of global industries accounting for products under 141 different broad product tariff schedules as detailed in the legislation. Notably, some of those broad categories contain dozens of subcategories. Assuming DOE includes all 83 countries from which the U.S. imports at least \$1 billion annually, DOE would be tasked with completing more than 11,700 industry global profiles regarding carbon intensity, a massive bureaucratic undertaking to validate imposing carbon tariffs on imported goods and commodities.

Threat to Farm Capital Investment

Of particular concern for U.S. agriculture are key inputs covered under the legislation: first and foremost, fertilizer. Also of concern, however, are crude oil and refined petroleum products like diesel, petrochemicals, which are on farm inputs to crop production. Moreover, the tariffs could cover aluminum, steel, and cement which are necessary for on-farm buildings such as livestock barns, grain bins, equipment sheds, and the like. Note that the impact of tariffs does not only affect imports, but also raises the cost of domestically produced goods.

The current economic and interest rate environment has already forestalled investments in renovating farm assets such as livestock barns and grain bins, as indicated by the Purdue University/CME Group's Ag Economy Barometer. The Barometer's Farm Capital Investment Index in June 2024 was just one point above its all-time low, with nearly 80 percent of farmers surveyed indicating that it is not a good time to make investments due to higher costs. Further increasing building material costs through new tariffs would not improve the outlook.

Threat to Fertilizer Costs

However, the most imminent threat is the impact tariffs would have on fertilizer, an on-going annual cost of production. Tellingly, the number one concern of farmers per the Purdue/CME Index is the higher costs of these inputs. According to USDA, U.S. farmers are expected to spend \$31.7 billion on fertilizers this year. New tariffs would only add to farmers' cost of production and eat away at operating margins.

Consider, this year's estimated fertilizer costs are up more than 37 percent from the 2016-2020 five year average of \$23.1 billion. That is an apt benchmark as fertilizer costs spiked in 2021 when countervailing duties were applied to phosphate fertilizer imports from Morocco at 19.97 percent and Russia in a range from 9.19 to 47.05 percent. With those additional duties an estimated 85 percent of the world's tradable supply of phosphate fertilizers were subject to U.S. tariffs. That situation was a significant factor in pushing prices to record highs.

Three years later, at the end of June 2024, diammonium phosphate (DAP) fertilizer prices in the U.S. at \$760 per ton remained 147 percent higher than in July 2020 when the Commerce Department began the process of imposing the duties. That outcome should serve as a cautionary tale about the rush toward applying new carbon tariffs on fertilizer imports on which U.S. farmers rely.

Of course, in 2022, when total on farm fertilizer costs hit their record of \$36.85 billion – nearly 60 percent higher than the 2016 to 2020 average – there was additional volatility in the market, including higher cost inputs for fertilizer production, domestic and global supply chain issues, and the War in Ukraine. Consider, however, the newly imposed tariffs did not solve any of these problems, rather added to the record prices, hitting farmers' bottom line. Similarly, new carbon tariffs would exacerbate any further market volatility.

Ultimately, DOE's analysis is likely to find similar results on the carbon intensity of global fertilizer production to an analysis completed last year by the Joint Research Centre of the European Commission. Indeed, the PROVE IT Act positions the U.S. to follow down the same unlikely path as the EU's Carbon Adjustment Border Mechanism (CABM). As such, nitrogen fertilizers, the most used widely used in the U.S., would be the targets of high tariffs. According to the European Commission's analysis, the weighted average global emissions intensity for the production of anhydrous ammonia is 2.82 metric tons of CO₂ equivalent (MTCO₂e) per ton of fertilizer, and for urea is 1.9 MTCO₂e per ton of fertilizer.¹

While at this point it is impossible to forecast at what rate the U.S. eventually would impose carbon tariffs, the point of new carbon tariffs would be to set them at punitive levels, at least as high as any other carbon tariff scheme to have the impact the PROVE IT Act promises. Thus, the EU CABM provides a benchmark. According to the intelligence and analysis firm Bloomberg NEF, the price of carbon under the CABM is forecast to be €80.00 per metric ton in 2025, prior to it going fully into effect on January 1, 2026. Adopting the EU carbon pricing scheme, weighed against the 12-month average prices of anhydrous ammonia and urea in the U.S. from June 2023 to June 2024, would result in an effective tariff of more than 31 percent on anhydrous ammonia and more than 29 percent on urea.

Or potential tariffs could be significantly higher. In its latest report on the social cost of carbon² the U.S. Environmental Protection Agency (EPA) pegged the cost of carbon at \$US 190 per metric ton, more than twice that of the EU. Using this bureaucratically "made in the USA" carbon value calculation would push the cost of carbon tariffs even higher than adopting the EU model. Both would be devastating to U.S. agriculture's competitiveness and add inflationary pressure to the U.S. food supply.

Threat to Domestic Industries and Ag Exports

By either standard, however, a domestic value for carbon is fundamental to imposing any new tariffs; there must be some applied domestic value on which tariffs would be set, not just the emissions profile of industries in exporting countries.

Therefore, unless U.S. fertilizer manufacturers – or manufacturers of any other product covered under the PROVE IT Act – were subject to a domestic carbon tax or required to purchase a carbon allowance permit like those under the EU's Emissions Trade System (ETS), a carbon tariff would not provide the required "like treatment" between domestic and foreign producers under the rules of the World Trade Organization (WTO). That reality is a fundamental issue about which the advocates of the PROVE IT Act have remained conspicuously silent.

¹ JRC Technical Report UR 31653 EN [Greenhouse gas emission intensities of the steel, fertilisers, aluminum and cement industries in the EU and its main trading partners, 2003.](#)

² [Report on the Social Cost of Greenhouse Gases: Estimates Incorporating Recent Scientific Advances](#)

There is no path around these inevitable consequences. Were carbon tariffs to be imposed without a U.S. domestic tax or carbon emissions value price, such tariffs would be challenged in the WTO, almost certainly successfully. That result would allow trading partners to impose their own retaliatory tariffs, which history has shown would fall heavily on U.S. agricultural exports.

Conclusion

The bottom-line, the PROVE IT Act would be a major disruption to international trade affecting thousands of U.S. industries and their customers, but mostly deliver a devastating shock to the U.S. economy. Agriculture provides an insightful example. Carbon tariffs would provide the cornerstone of building a European-style agriculture and climate policy regime, with all the predictable results. Fewer acres would be in production, yields would be reduced, and farmers' cost of production would increase, with no benefits for consumers or the U.S. economy. In short, the U.S. would cede its competitive advantage in food production and agricultural exports.

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