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Topic: Comment on NHTSA's assessment of the need to conserve energy in the Notice of Proposed Rulemaking for the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks, Docket No. EPA-HQ-OAR-2018-0283 and Docket No. NHTSA-2018-0067

My name is Jason Bordoff. I have spent my career investigating the intersection of economics, energy, the environment, and national security. Currently, I am a Professor of Professional Practice at Columbia University's School of International and Public Affairs (SIPA) and Founding Director of Columbia University SIPA's Center on Global Energy Policy.

Prior to joining the Columbia University faculty, I served until January 2013 as Special Assistant to the President and Senior Director for Energy and Climate Change on the Staff of the National Security Council. I have held other senior policy positions in the White House, including as the Senior Advisor for Energy and Environmental Policy on the National Economic Council, and the Associate Director for Energy and Climate Change on the Council on Environmental Quality. I also spent four years as the Policy Director for the Hamilton Project, an economic policy initiative of the Brookings Institution.

I am a graduate of Brown University (Honors AB, Political Science, 1994); Oxford University (MLitt, Politics, Marshall Scholar, 1998), and Harvard Law School (JD, cum laude, 2004). In addition to the above experience, I have worked as a consultant with McKinsey & Company, a leading global strategy consultancy firm, and I have served as both the Special Assistant to the Deputy Secretary of the U.S. Treasury Department and as a law clerk on the U.S. Court of Appeals for the D.C. Circuit. Throughout my career, I have written and spoken extensively on energy policy, the environment, and climate change.

I have reviewed the relevant portions of the recent notice of proposed rulemaking published by the National Highway Traffic Safety Administration (NHTSA) regarding the proposed "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks" (SAFE Vehicles Rule), which NHTSA and the Environmental Protection Agency (EPA) have put forth in proposing to amend certain existing Corporate Average Fuel Economy (CAFE) and tailpipe carbon dioxide emissions standards for passenger cars and light trucks and

to establish new standards, covering model years 2021 through 2026. My understanding is that NHTSA is now arguing that the CAFE standards at issue "are no longer appropriate"[1] in part because NHTSA believes that there is no longer a need that the United States work to conserve energy.[2] In short, NHTSA seems to believe that "gasoline price shocks are no longer as much of a threat as they were" when the Energy Policy and Conservation Act was passed by Congress, and that therefore the United States no longer needs to conserve oil.

My understanding of NHTSA's position is that, in evaluating possible CAFE standards, NHTSA considered four things: (1) consumer costs; (2) national balance of payments; (3) environmental implications; and (4) foreign policy implications. The bulk of NHTSA's argument relies on the United States' recent rapid growth in oil production from shale formations, which NHTSA believes both makes wealth transfer to oil exporting countries irrelevant for the foreseeable future and insulates consumers from the effects of price shocks. NHTSA relies on projections that the US will continue to produce enough oil to satisfy its own energy needs, or will become a net energy exporter. Thus, NHTSA concludes that "[t]his has added new stable supply to the global oil market and reduced the urgency of the U.S. to conserve energy."[3] With regard to environmental implications, while NHTSA calls environmental considerations "more complicated," it still maintains that "it is hard to say that increasing CAFE standards is necessary to avoid destructive or wasteful use of energy as compared to somewhat-less-rapidly-increasing CAFE standards," because, in NHTSA's view, the differential temperature increase would be "small" and the more stringent CAFE standards would not "sufficiently address climate change to merit their costs."[4] Under it's proposal, NHTSA "anticipates that global temperatures would increase by 0.003°C in 2100 compared to the augural standards,"[5] and NHTSA believes that this is not enough to merit stricter CAFE standards for environmental reasons.

As a result of my experience, I can attest to several points relevant to NHTSA's proposed conclusion that the U.S. no longer needs to conserve energy.

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[1] The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rules for Model Years 2021-2026 Passenger Cars and Light Trucks, 83 Fed. Reg. 42986, 42988 (Aug. 24, 2018).
[2] The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rules for Model Years 2021-2026 Passenger Cars and Light Trucks, 83 Fed. Reg. 42986, 43210-16, 43226 (Aug. 24, 2018).
[3] The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rules for Model Years 2021-2026 Passenger Cars and Light Trucks, 83 Fed. Reg. 42986, 43212 (Aug. 24, 2018).
[4] The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rules for Model Years 2021-2026 Passenger Cars and Light Trucks, 83 Fed. Reg. 42986, 43215 (Aug. 24, 2018).
[5] The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rules for Model Years 2021-2026 Passenger Cars and Light Trucks, 83 Fed. Reg. 42986, 43216 (Aug. 24, 2018).

Oil Prices are Inherently Volatile, Regardless of the Amount of Oil the U.S. Produces.

First, and broadly, oil prices are inherently volatile, and may be increasingly so in the future.[6] Prices in just the last couple of years exhibit this volatility. Oil prices collapsed from $115 per barrel in mid-2014 to the high $20s by early 2016. This year, prices rebounded to more than $80 per barrel. We may well see even greater oil price volatility in the future, particularly as global spare capacity wanes.[7]

The age of shale oil and of decarbonization only make projections more uncertain. On the supply side, the shale revolution remains a relatively recent phenomenon and there remains great uncertainty about its ultimate magnitude and duration, as well as whether it can be or will be replicated in other parts of the world. The demand outlook is equally cloudy. Despite mounting speculation about peak oil demand, it is far too early to predict the end of oil—or even the end of U.S. oil import dependence.

Betting on perpetual U.S. energy self-reliance is a risky gamble. Consider that it was only a decade ago that dozens of projects were being proposed and billions of dollars raised to build projects to import liquefied natural gas into the U.S. Today, the U.S. is a net exporter of natural gas and projected to be one of the world's largest within a few years. The U.S. net oil import outlook looks rosy today, but there remains much uncertainty.

One reason that oil prices are so unpredictable and volatile is that geopolitical risk remains a factor affecting oil prices, regardless of the amount of oil the United States produces. This has been evident recently, with five factors pushing up oil prices this past summer despite the ramp-up in shale production:

First, and perhaps most importantly, the recent oil price surge was driven by President Donald Trump's decision to withdraw from the Iran nuclear agreement and thus re-impose sanctions on Iranian oil sales. While there is great uncertainty about the ultimate impact of new sanctions, the market was understandably concerned about the potential hit to Iran's oil production and 2.2 million b/d of exports (as of June).[8]

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[6] Jason Bordoff, "Don't Get Used to Cheap Gas," *Wall Street Journal*, September 18, 2015, http://blogs.wsj.com/experts/2015/09/18/dont-get-used-to-cheap-gas/.
[7] Bob McNally, *Crude Volatility: The History and the Future of Boom-Bust Oil Prices* (Columbia University Press: 2017), https://cup.columbia.edu/book/crude-volatility/9780231178143.
[8] International Energy Agency, Oil Market Report, July 12, 2018, p. 19.

The second factor that pushed up prices recently was the unexpected collapse of Libyan production from nearly 1 million b/d in May to around 500,000 b/d in July,[9] following attacks on key export infrastructure and a subsequent blockade of several oil ports by the forces of Libyan military commander Khalifa Haftar, who attempted—unsuccessfully—to hand over control of oil export terminals in Eastern Libya to a newly formed national oil company from the one controlled by the UN-backed government in Tripoli.[10]

Third, Venezuelan production continues to fall, and there is a significant risk that its decline could accelerate further in the near future. The International Energy Agency (IEA) projects Venezuelan production to fall below 1 million b/d by the end of the year from just under 1.4 million b/d in May, but this may well be too conservative an estimate.

Fourth, short-term production outages in Canada, Brazil and the North Sea have further reduced supply in recent months. And other risks of geopolitical supply disruptions in places like Nigeria, Iraq, or around the Strait of Hormuz continue to loom over oil markets.

Fifth, there is a very narrow buffer of spare capacity in today's oil market. Sufficient spare capacity is a critical factor to maintain crude oil stability, as it allows the market to quickly adjust to unexpected supply disruptions. Particularly with Saudi Arabia's recent decision to ramp up production, the level of spare capacity in the market today is at a historic low.

When prices began to fall again in July 2018, several geopolitical factors were again responsible:

First, at the OPEC+ meeting in late June, producers agreed to hike production, following public and private pressure by the U.S. to bring oil prices down, including several tweets by President Trump attacking OPEC for pushing up prices. Following the OPEC+ meeting, Saudi Energy Minister Khalid Al-Falih said he would do "whatever is necessary" to keep the market well-supplied and that an additional 1 million b/d would be added to the market.[11] Saudi Arabia gave itself the flexibility to increase output further if needed to cap prices. Saudi oil production has risen from below 10 million b/d to 10.5 million b/d in June and is expected to rise still further toward 11 million b/d.[12]

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[9] International Energy Agency, Oil Market Report, July 12, 2018, p. 18.
[10] Aidan Lewis, "How unstable is Libya's oil production?," Reuters, July 16, 2018, https://www.reuters.com/article/us-libya-oilexplainer/how-unstable-is-libyas-oil-production-idUSKBN1K61Y6.
[11] David Sheppard and Anjli Raval, "Russia backs Opec plan to pump more oil," Financial Times, June 23, 2018, https://www.ft.com/content/d9e95584-76f7-11e8-8e67-1e1a0846c475.
[12] International Energy Agency, Oil Market Report, July 12, 2018, p. 16.

Second, the Trump administration's surprise announcement of its intention to impose a 10% tariff on an additional $200 billion worth of Chinese goods have raised fears that the escalating trade war between the U.S. and China may lead to a slowdown in global economic growth and thus in commodities generally, including oil demand.[13]

Third, General Khalifa Haftar on July 11 handed over Libya's eastern export terminals to the Tripoli-based National Oil Company following several weeks of blockade, allowing operations to resume and expectations of a return to pre-disruption production levels of roughly 1 million b/d as shipments from Eastern ports resumed. However, the instability of the country remains, and this recent increase is not secure and is highly likely to fall again.

Fourth, the Trump Administration softened its rhetoric about the implementation of sanctions against Iran, leading to expectations that the loss of Iranian oil supply may be more gradual.[14] After oil prices rose sharply in response to statements that buyers would be required to reduce Iranian oil imports to zero by November, the State Department reversed course. Administration officials have since signaled that exceptions may be available,[15] although the level of significant reduction necessary to qualify remains unclear.[16]

Fifth, press reports suggested that the Trump Administration may consider releasing oil stocks from the Strategic Petroleum Reserve,[17] Although Energy Secretary Rick Perry was quick to dismiss the idea.[18]

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[13] Chris Giles and Robin Wigglesworth, "IMF warns Trump tariffs could hit global growth by 0.5%," Financial Times, July 16, 2018, https://www.ft.com/content/b3e31d4a-8901-11e8-b18d-0181731a0340
[14] Lesley Wroughton, "Mnuchin says U.S. to consider waivers on Iran sanctions," Reuters, July 16, 2018, https://in.reuters.com/article/usa-iran-mnuchin/mnuchin-says-u-s-to-consider-waivers-on-iran-sanctions-idINKBN1K61I7.
[15] Nick Wadhams, "State Department Leaves Door Open to Iran Oil Import Exemptions," Bloomberg, July 2, 2018, https://www.bloomberg.com/news/articles/2018-07-02/state-department-leaves-door-open-to-iran-oil-import-exemptions.
[16] Timothy Gardner, "U.S. actively considering waivers on Iran oil sanctions," Reuters, October 5, 2018, https://www.reuters.com/article/us-usa-iran-sanctions/u-s-actively-considering-waivers-on-iran-oil-sanctions-idUSKCN1MF2JO.
[17] Ari Natter, "Trump Considers Tapping U.S. Oil Reserve as Prices at the Pump Rise," Bloomberg, July 13, 2018, https://www.bloomberg.com/news/articles/2018-07-13/trump-said-to-mull-tapping-u-s-oil-reserve-as-pump-prices-rise.
[18] Timothy Gardner, "U.S. will not tap oil reserve as Iran sanctions loom: Perry," Reuters, September 26, 2018, https://www.reuters.com/article/us-usa-energy-spr/u-s-will-not-tap-oil-reserve-as-iran-sanctions-loom-perry-idUSKCN1M62VG.

Finally, and more broadly, the price rebound of the last year has given a boost to several sources of non-OPEC production, notably the U.S., Canada and Brazil, all of which are likely to grow robustly this year and next.

Increased U.S. Oil Supply Does Not Insulate Drivers from Higher Pump Prices in Today's Globally Integrated Market.

In a globalized oil market, the real risk of an oil supply disruption to the US economy does not lie in the physical barrels that may be kept from reaching the United States but rather in the financial and economic ripple effects of price shocks. In the 1970s, oil price controls existed in the United States, and most internationally traded oil was sold under long-term contracts. A disruption in contracted shipments could result in a physical shortage for buyers because neither strategic and commercial stockpiles nor a large spot market existed at the time. In the intervening years, the oil market has become the largest and most liquid commodity market in the world with vibrant futures markets. The vast majority of globally traded oil is bought and sold at a price indexed to benchmark crude prices and mature pricing hubs in regions including Europe (Brent), the United States (WTI), and the Middle East (Dubai).

Since the oil shocks of the 1970s, the oil market has become globally integrated and tightly interconnected. A deep and highly liquid futures market has developed. Price formation has thus moved from "posted prices" set by oil companies to indexation on market-determined oil futures. As a result of these changes, supply disruptions are far less likely today to result in lasting physical shortfalls in any given consuming market and more likely to cause price increases everywhere.

Consequently, with regard to consumer costs, increased U.S. oil supply does not insulate drivers from higher pump prices, which are largely determined by oil prices set in a globally integrated market.[19] In a globalized oil market, the consequence of a supply disruption anywhere is a price increase everywhere—regardless of how much oil the United States imports.[20]

Because oil and refined petroleum products can be freely traded, surging U.S. production and decreasing import dependence does not protect consumers at the pump from global oil price

[19] John Deutch and James R. Schlesinger, "National Security Consequences of U.S. Oil Dependency," Council on Foreign Relations, Independent Task Force Report No. 58, October 2006, pp.15, http://www.cfr.org/oil/national-security-consequences-us-oil-dependency/p11683.
[20] Jason Bordoff, "America's energy policy: From independence to interdependence," Horizons, Autumn 2016, Issue No. 8, pp.192, https://www.cirsd.org/en/horizons/horizons-autumn-2016--issue-no-8/americas-energy-policy-from-independence-to-interdependence.

shocks.[21] The price at the pump in America has risen and fallen to the same degree with the global price of crude oil when we were importing 60 percent of our consumption 10 years ago as when the United States only imported 24 percent last year. Gasoline prices at the pump in the U.S. are especially sensitive to changes in the global crude oil price due to the relatively low level of fuel taxation compared to other OECD economies. According to data from the IEA, more than 80% of the retail price of gasoline in America is directly or indirectly exposed to fluctuations in the price of crude oil.[22]

Even if the United States were to become fully self-sufficient as far as its oil needs are concerned, that would not insulate it from the risk of oil supply disruptions. As the United States is becoming increasingly "energy independent" on a net basis, it is also becoming ever more closely integrated with the global oil market at the same time. Rising domestic output does nothing to diminish U.S. linkages with world energy markets. On the contrary, the globalization of oil and energy markets has heightened the energy interdependence of the United States and the rest of the world. In an integrated world oil market, supply disruptions affect U.S. and global prices, regardless of how import dependent we are. And domestic oil prices can spike regardless of whether U.S. refineries import from a country with a supply disruption.

The Rise of the U.S. Shale Oil Industry Must Not Obscure the Enormous Uncertainty that Clouds the Outlook for Future Oil Supply.

The rise of the U.S. shale oil industry, remarkable as it may be, must not obscure the enormous uncertainty that clouds the outlook for future oil supply, both in the United States and globally. Having surprised on the upside, shale oil might possibly defy expectations, this time on the downside. The shale boom is a relatively recent phenomenon, and considerable uncertainty remains about its long-term scope, longevity, and price responsiveness. There is reason to be cautious about shale's future and skeptical of claims that the short-cycle nature of shale makes it a new swing supplier able to balance oil markets. Despite breathless claims after the oil price collapse in late 2014 that OPEC was dead and shale could now balance oil markets,[23] neither claim seems valid as oil prices hit $80 per barrel.

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[21] Michael Levi, *The Power Surge: Energy, Opportunity, and the Battle for America's Future*, (Oxford University Press: 2013), pp.64-64.
[22] International Energy Agency, Monthly Oil Price Statistics, July 12, 2018, p.7, http://www.iea.org/media/statistics/surveys/prices/mps.pdf.
[23] Alan Greenspan, "OPEC Has Ceded to the US Its Power over Oil Price," Financial Times, February 19, 2015, https://www.ft.com/content/92ab80e4-b827-11e4-b6a5-00144feab7de.

As discussed above, oil production forecasts are inherently uncertain. Shale oil, although it differs in important ways from the rest of the industry, is no exception. In fact, there is, in many ways, more uncertainty around the outlook for shale oil than for conventional oil or deepwater projects. And the supply of those other sources of oil, too, may lag demand given the very large cuts in capital investments that have accompanied the collapse in oil prices over the last few years.

Moreover, despite its short-cycle nature, shale is not swing supply. Although shale oil is more responsive to price changes than conventional supply, it cannot serve as a swing supplier to stabilize oil markets in the way true spare capacity (largely held by Saudi Arabia) can. It takes at least 6–12 months for U.S. shale to respond to price changes. It cannot quickly respond to market disruptions the way true spare capacity can. Moreover, recent changes in the shale industry could lead to decreased elasticity in the future. In a bid to reduce costs and improve profitability, shale production has become more capital intensive. Projects are getting more complex. Lead times are getting stretched. To reduce drilling costs and boost productivity, shale operators are moving from small single-well pads to much larger pads that can support as many as 12 interconnected wells stretching across multiple leases. Shale companies are devoting considerable efforts to consolidate their leases and bring adjacent parcels under common management. These efforts can bring the development of shale production projects from a matter of a few months to up to two years. While this is still less than most conventional oil projects, this is nevertheless reducing the ability to ramp up output quickly in response to price hikes or supply disruptions. For example, although shale oil is much more responsive to oil prices, oil prices still plunged below $30 per barrel at the start of 2016 and soared to $80 per barrel earlier this year. Shale oil could not swing quickly enough to stabilize markets. This role fell to OPEC instead in both cases, first to put a floor under prices by cutting supply and, more recently, to provide relief by ramping up production.

Only a handful of OPEC members, particularly Saudi Arabia, hold a meaningful amount of spare capacity—the ability to ramp up production in a matter of weeks and sustain it over time. That is why, despite the shale boom, President Trump nonetheless was forced to ask Saudi Arabia publicly and privately to provide price relief by increasing production. And those levels of traditional spare capacity can run low, as is the case today.

The International Energy Agency projects that the U.S. will zero out oil imports on a net basis by the late 2020's. But there is great uncertainty in these projections, as when the IEA, along with many others, were slow to recognize the true potential of shale oil and underestimated U.S. shale supply growth for years. Since the beginning of the shale revolution, the shale oil industry has consistently surprised market participants. Oil forecasting in general is highly uncertain.

Shale oil forecasting is even more so due to the relative novelty of the industry. On the one hand, technology and productivity continues to improve and costs continue to come down, suggesting a robust supply outlook; on the other hand, there are concerns that the quality of the resource declines as producers move further and further out from the most productive shale plays.[24] The bottom line is that continued steep growth in U.S. shale oil supply, as likely as it might appear today, cannot be taken for granted. Although I expect shale production to grow robustly for several more years at least, there are a number of factors that could cause U.S. shale production to fall short of expectations and become less price elastic over time than it has been so far.

Relatedly, public opposition to fracking is on the rise.[25] Environmental groups, some of which initially supported shale gas for its ability to displace coal, are increasingly aligned in opposition to shale. A number of U.S. states—namely, New York, Maryland, and Vermont—have banned fracking altogether.[26] In Oklahoma, a traditional oil state where fracking is widespread, an increased incidence of seismic tremors and minor earthquakes has been associated with the disposal of wastewater from fracking sites, and recent activity suggests hydraulic fracturing itself may trigger seismic activity.[27] The number of earthquakes has fallen since state regulators imposed stricter limits on wastewater disposal in 2016 and 2017.[28] In the 2016 Democratic primary, Senator Bernie Sanders supported a ban on fracking. Even former secretary of state Hillary Clinton, who refused to support a ban on fracking, felt pressured to note that once her conditions for production were put in place, "there will [not] be many places in America where fracking will continue to take place."[29] In the next presidential primary, there will be even

[24] Ed Crooks, "This Week in Energy: A Lasting Oil Alliance," Financial Times, January 26, 2018, https://www.ft.com/content/5dbca0c8-02b3-11e8-9650-9c0ad2d7c5b5.
[25] See, for example, Frank Newport, "Americans Tilt Toward Protecting Environment, Alternative Fuels," Gallup, March 15, 2017, http://news.gallup.com/poll/206159/americanstilt-toward-protecting-environment-alternative-fuels.aspx; also see Gallup News, "Topics A to Z: Energy," accessed on May 1, 2018, http://news.gallup.com/poll/2167/energy.aspx.
[26] John Hurdle, "With Governor's Signature, Maryland Becomes Third State to Ban Fracking," StateImpact Pennsylvania, April 4, 2017, https://stateimpact.npr.org/ pennsylvania/2017/04/04/with-governors-signature-maryland-becomes-third-state-toban-fracking/.
[27] David Wethe, "A New Breed of Fracking Quakes Emerges," Bloomberg, February 9, 2018, https://www.bloomberg.com/news/articles/2018-02-09/new-breed-of-frackingearthquakes-sends-warning-to-oil-drillers.
[28] Liz Hampton, "Oklahoma Regulator Issues New Directive to Curb Quakes," Reuters, February 24, 2017, https://www.reuters.com/article/us-oklahoma-quakes-regulator/ oklahoma-regulator-issues-new-directive-to-curb-quakes-idUSKBN1632GH; Liz Hampton, "Oklahoma Regulators Target More Disposal Wells Following Cushing Quake," Reuters, November 8, 2016, https://www.reuters.com/article/us-oklahoma-quake/oklahomaregulators-target-more-disposal-wells-following-cushing-quake-idUSKBN1332TS.
[29] Valerie Volcovici, "Clinton's Pledge to Curtail Fracking Falls on Unconvinced Ears," Reuters, March 7, 2016, https://www.reuters.com/article/us-usa-election-frackingidUSMTZSAPEC38PAFFSL.

greater opposition to shale among Democrats. Hostility to fracking is increasingly bipartisan too, with anti-fracking sentiment gaining ground among Democrats and Republicans alike.[30]

Growing environmental opposition to new hydrocarbon infrastructure—part of the so-called "keep it in the ground" movement—may also stymie shale growth, as new oil infrastructure as well as gas infrastructure will be needed to accommodate the projected growth rates of shale in the coming years. A possible backlash against shale could lead to more new regulations or bans that curtail the scope of activity or raise compliance costs for operators, thus undermining shale economics and diminishing the prospects of future production growth. In Colorado, for example, there is a provision on the ballot in November 2018 to sharply restrict shale production that has gathered much support, although its prospects for passage remain uncertain.

There Remains a Political Risk to Oil Supplies.

The last few years have seen several oil supply disruptions due to political turmoil and state failure. These include Syria, Yemen, Libya, and to some degree Iraq. Today Venezuela is suffering accelerating production declines and teetering on the brink of economic collapse. A total loss of Venezuelan supply cannot be ruled out. No amount of strategic reserves can provide a long-term substitute for a protracted loss of production from a major exporting country. Supply disruptions due to war or civil war tend to be long lasting. Libyan production fell to a trickle during the 2011 civil war and has yet to fully recover to the prewar level of 1.6 million b/d. Current production hovers around 1 million b/d, and effective production capacity is estimated to have been cut to 1.2 million b/d. Most of Syria's and Yemen's production remains offline—prior to the 2011 Arab Spring, the two countries produced close to 400,000 and 300,000 b/d, respectively. Venezuelan production has plunged from around 3 million b/d as recently as 2008 to 1.5 million b/d by December 2017 and is likely to keep falling.

Geopolitical risk to oil supplies extends to foreign and economic policy, too. The Obama Administration, for example, worked with European allies to curtail Iranian oil supplies through the imposition of economic sanctions aimed at preventing Iran from acquiring nuclear weapons. Recently, the Trump Administration has announced it will reimpose sanctions against Iran, aiming to curtail an even larger volume of Iranian exports. Both the Obama and Trump Administrations also imposed sanctions aimed at reducing the ability of the Russian oil sector to attract the technology and financing needed to grow oil production.

[30] Art Swift, "Opposition to Fracking Mounts in the U.S.," Gallup, March 30, 2016, http://news.gallup.com/poll/190355/opposition-fracking-mounts.aspx.

In a globalized oil market, the risk of oil being used as a weapon by producer countries seeking to disrupt global supplies and push up prices is markedly diminished. But it, too, should never be ruled out entirely. Just recently, in the days following the disappearance of journalist Jamal Khashoggi, Saudi Arabia sought to remind the U.S. that it had leverage to harm the U.S. in response to any possible sanctions or other punishments against the Kingdom, with a senior official quoted by the Saudi state news agency saying, "The kingdom's economy has an influential and vital role in the global economy."[31] This veiled threat was widely seen as referring to its oil supplies. The fears were exacerbated when the head of the Arabiya news network wrote a piece explicitly threatening to use oil as a weapon.[32] Saudi officials, including Energy Minister Khalid al-Falih, were quick to walk back the threat, recognizing that any disruption in oil supply would do far more lasting harm to itself than to the U.S. While a disruption in Saudi oil supplies is unlikely, the threat was a stark reminder that oil remains a geopolitical tool—and further that no matter how much oil the U.S. produces or how little we import, prices at the pump will still spike if there is a disruption in any global oil supply, whether the U.S. imports from that country or not.

The Most Effective Policies to Protect Consumers from Oil Price Spikes are those that Reduce Oil Intensity of the Economy.

Given the risks, the most effective policies to protect consumers from ineluctable oil price spikes are those that reduce our oil consumption in the first place. Continuing with planned fuel economy increases through CAFE standards is one effective way to reduce the oil intensity of the economy and mitigate the adverse impact of future oil price increases on American drivers. Continuing to invest in R&D in alternative transportation fuels and technologies can also help reduce our society's oil use. In addition to protecting consumers from price volatility, such policies are also needed to address the long-term threat of climate change. Policies to reduce oil demand and investments in alternative transportation fuel R&D not only increase our energy security, but reduce greenhouse gas emissions that lead to potentially severe climate change impacts.

In conclusion, on the basis of my experience and as set forth in the facts above, I believe that NHTSA's conclusion that the U.S. no longer needs to conserve energy worsens the position of

[31] Saudi Press Agency, "General / Official Source: KSA confirms its total rejection of any threats and attempts to undermine it," October 14, 2018, https://www.spa.gov.sa/viewfullstory.php?lang=en&newsid=1827989#1827989.
[32] Turki Aldakhil, "Opinion: US sanctions on Riyadh would mean Washington is stabbing itself," Al Arabiya News Channel, October 14, 2018, https://english.alarabiya.net/en/features/2018/10/14/US-sanctions-on-Riyadh-would-mean-Washington-is-stabbing-itself.html.

the United States in all of the areas that NHTSA considers – consumer costs, national balance of payments, environmental implications, and foreign policy implications. The most effective way to protect the interests of the United States and the U.S. consumer is to pursue policies that reduce the oil intensity of the U.S. economy and promote energy conservation.

Yours sincerely,

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