

October 5, 2022

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Building Technologies Office, EE-5B
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Submitted via Regulations.gov

RE: “Energy Conservation Program: Energy Conservation Standards for Consumer Furnaces,”
Docket ID No. EERE-2014-BT-STD-0031

Ms. Hegarty:

We appreciate this opportunity to provide comments¹ to the Department of Energy on the proposed efficiency standard modifications entitled “Energy Conservation Program: Energy Conservation Standards for Consumer Furnaces.”²

In summary, this comment will focus on the following key points:

- 1. The proposed standard modification does not meet the “economically justified” criteria for prescribing new or amended standards;*
- 2. The so-called social cost of greenhouse gases obscures regulatory costs;*
- 3. The proposed standard unjustifiably reduces consumer choice;*
- 4. The proposed standards are unnecessary given the wide availability of condensing furnaces and their existing market penetration; and*
- 5. The proposed standard does not meaningfully fulfill the intent of the Energy Policy and Conservation Act.*

The Proposed Standard Modification Does Not Meet the “Economically Justified” Criteria for Prescribing New or Amended Standards.

In determining whether a standard’s burden exceeds its economic benefits, the Secretary of Energy is directed by the Energy Policy and Conservation Act to consider seven factors³. While the analysis presented by the Department in the Notice of proposed rulemaking⁴ is questionable on each factor, the logic presented by numbers (5) and (6) is especially devoid of rationale and

¹ The views I have expressed in this comment are my own and should not be construed as representing any official position of The Heritage Foundation.

² “Energy Conservation Program: Energy Conservation Standards for Consumer Furnaces,” [Federal Register :: Energy Conservation Program: Energy Conservation Standards for Consumer Furnaces](#) (accessed October 5, 2022).

³ [42 U.S.C. 6295\(o\)\(2\)\(B\)\(i\)\(I\)-\(VII\)](#)

⁴ [Federal Register, Vol. 87, No. 129, July 7, 2022, Proposed Rules.](#)

should result in a cessation of the proposed rule as allowed by the Energy Policy and Conservation Act in its criteria for prescribing a new or amended rule.

Specifically, factors (5) and (6) include:

- The effect of any lessening of competition, as determined in writing by the Attorney General, that is likely to result from the standard; and
- The need for national energy and water conservation.

Diminished Competition

The proposed rule does not simply alter standards; it would effectively remove a technology from the marketplace and reduce competition. This is antithetical to Congress's wishes as evidenced by factor number five in the EPCA that makes clear that maintaining a competitive market for the covered products is an essential element of the cost-benefit calculation. Yet ultimately the rule would have a tremendous effect on the furnace market by eliminating an entire technology. According to an Energy Information Agency article published on February 17, 2015, "Going from a minimum efficiency level of 78 to 92 AFUE would eliminate noncondensing gas furnaces from the marketplace"- exactly what the proposed rule does.⁵

While the Department of Energy determined that noncondensing furnaces do not constitute a separate marketplace offering relative to their preferred condensing models, their conclusion is based on an overly narrow definition. Essentially, the Department concluded that because both technologies are used to heat homes, they are not competitors and thus should not be considered separate product categories for regulatory purposes. Specifically, "DOE does not divide product classes based on condensing technologies and associated venting systems when analyzing potential energy conservation standards."⁶

This is like saying that internal combustion engine automobiles and electric vehicles fall in the same product category because both are used for transportation. Taken to the extreme, DOE would then conclude that, given the much greater efficiency of internal combustion engines, banning electric vehicles is justified because everyone could simply use a vehicle with a combustible engine.

Of course, this reasoning is absurd. While both products are used for transportation, other characteristics make them very different. The same is true for the condensing versus noncondensing furnaces. While both heat homes, they have different costs, perform differently, and have different installation requirements, for example.

These differences matter to consumers and is why both technologies are well represented in the marketplace. Indeed, the Department of Energy assumes that noncondensing furnaces will

⁵ [Today in Energy, U.S. Energy Information Agency, "Proposed efficiency standard may eliminate noncondensing gas furnaces,"](#) February 17, 2015.

⁶ <https://www.federalregister.gov/d/2022-13108/p-302>

represent 42 percent of furnace shipments in 2029, prior to its proposed rule taking effect, demonstrating the enduring value that American consumers find in noncondensing furnaces.⁷

What the Department does provide analysis of the impact on competition, it seems not to appreciate the positive benefit that having both types of furnaces will have on long term market dynamics.⁸ As the White House published on July 9, 2021, “Healthy market competition is fundamental to a well-functioning U.S. economy.” It goes on to point out that insufficient competition will lead to higher prices and lower quality and argues that one of the causes of this condition is too much market concentration.⁹

Unfortunately, should this rule be finalized, it will lead to the precise market conditions that the White House seems to be arguing against. Though the White House analysis focuses on market concentration regarding firms, technology concentration is just as detrimental. In removing an entire technology from the market, this rule would limit the incentive for condensing furnace manufacturers to lower prices, or even to increase efficiency further, because the regulation will have captured a substantial portion of the market for them. Indeed, absent the countervailing force of competition, the more likely outcome will be for condensing furnace manufactures to increase prices.

As reported by DOE, the market already only consists of 15 firms that manufacture the regulated furnaces and four of those are small businesses.¹⁰ By removing a technology from the market, the rule eliminates an opportunity for firms to specialize in non-condensing technology and gain market share. While they may attempt to retool to compete, it is unlikely that the market will support the same number of firms manufacturing furnaces that all adhere to the strict regulatory standards proposed in this rule.

This will likely lead to fewer firms offering furnaces to consumers, as DOE’s analysis virtually confirms, when it concludes that due to the high costs (\$5.5 million) to convert manufacturing to produce condensing furnaces, one “small manufacturer could also choose to leave the MHGF (Mobile Home Gas Furnace) business.”¹¹

Fewer firms and less technological competition will be bad for consumers and is antithetical to the Energy Policy and Conservation Act. Having a lower price option that may be less efficient compete against a more efficient higher price option will engender competition within the furnace industry to develop technologies that move prices lower and efficiency higher overall.

⁷ U.S. Department of Energy, “Technical Support Document: Energy Efficiency Program for Consumer Products and Commercial and Industrial Equipment: Consumer Furnaces,” P. 81-5, June, 2022, www.energy.gov/sites/default/files/2022-01/dw-tsd.pdf, (Accessed October 4, 2022) .

⁸ The author does not condone the conclusions or the analysis of the cited White House publication but uses the reference to demonstrate a broad recognition that marketplace competition is essential to a properly functioning marketplace and that competition broadly provides consumer benefit.

⁹ *White House Written Materials*, “The Importance of Competition for the American Economy,” The White House, July 9, 2021.

¹⁰ <https://www.federalregister.gov/d/2022-13108>

¹¹ <https://www.federalregister.gov/d/2022-13108>

By eliminating half of the equation, this rule would eliminate an essential force to move furnace technology forward.

Congress, right or wrong, sought to improve consumer product efficiency when it passed the Energy Policy and Conservation Act, but it was not seeking to empower the Department of Energy to in effect ban a product that according to the Department of Energy's estimate represents 42 percent of the market¹². Indeed, as evidenced by factor number 5, Congress was very cognizant of consumer choice.

Given the White House's stated commitment to competition, the clear intentions of Congress, and acknowledgement of its benefits to the American consumer, the proposed rule would conflict with both White House policy and more important, the Energy Policy and Conservation Act. DOE should specifically address why its actions to diminish competition and reduce consumer choice should override the clear intentions of the EPCA and the White House's stated policy. This is especially true since the Department acknowledges that the furnace industry is relatively small and the industry will take on substantial compliance costs associated with the new standard, which will likely lead to fewer firms offering furnaces

DOE's choice to move forward absent such clarification is arbitrary and capricious, and the rule should be abandoned.

Does Not Establish the Need for Energy Conservation

Congress also expressed a deep concern with ensuring that any conservation measure be supported by an underlying need for energy conservation. In fact, the Notice of Proposed Rulemaking specifies when the "DOE may not prescribe a standard." Among other factors that the Secretary must consider, the NOPR states that, he must factor "The need for energy and water conservation."¹³

Even if Congress was not so specific, a need for a such a standard, given its commensurate effect on markets and costs to American consumers, should be a prerequisite. Yet the Department of Energy provides little information towards establishing such a condition in the proposed rule.

Indeed, the value, if not the underlying legitimacy, of government imposing its will on the American consumer when considering this conservation factor could only be relevant when there is a current and pressing problem concerning conservation. Such a scenario does not exist now, and in fact, there is energy abundance, unfortunately some of which is untapped largely due to government constraints.

Simply assuming this factor is met, especially in light of such abundance, in effect renders the entire process of the Secretary reviewing this factor moot. Congress envisioned this factor would

¹² U.S. Department of Energy, "Technical Support Document: Energy Efficiency Program for Consumer Products and Commercial and Industrial Equipment: Consumer Furnaces," P. 81-5, June, 2022, www.energy.gov/sites/default/files/2022-01/dw-tds.pdf, (Accessed October 4, 2022) .

¹³ 42 U.S.C. 6295(o)(2)(B)(i)

not always come into play, which is why the Secretary is expected to review its applicability in specific circumstances.

So what is this energy abundance?

According to the U.S. Energy Information Agency (EIA), in 2020 the United States held over 373 billion barrels of technically recoverable crude oil reserves, which would provide the U.S. with over 50 years of supply. The same is true for natural gas. EIA estimated in 2020 that the U.S. held 2,925.8 trillion cubic feet of technically recoverable natural gas. At current consumption levels, that equates to nearly 100 years of supply.¹⁴

Of course, new discoveries are always occurring that would expand this supply over time, which is demonstrated by the growing availability of unconventional sources like oil shale. According to EIA, the U.S. currently holds 195.5 billion barrels of crude oil and 1,712.9 trillion cubic feet of natural gas in unconventional reserves. According to the Institute for Energy Research, conventional and unconventional reserves combine to provide nearly 300 years of energy supply at current consumption levels.¹⁵

These energy resources do not even account for uranium deposits, which are widely spread throughout the U.S., nor for advancements in other energy generating technologies.

The United States is demonstrably in an era of energy abundance, unlike in the early 1970s when the Energy Policy and Conservation Act was passed. Given that the relevant context of any imposed energy efficiency mandate is at a minimum, some demonstrable condition of energy scarcity, and that the U.S. obviously does not meet that condition, the justification for this proposed rule is clearly weakened.

Further, within the context of establishing the need for energy conservation, the proposed rule and underlying analysis attempts to provide a justification based on alleged emissions benefits. But even this defense is weak when looked at in the context of broader air quality trends. According to the U.S. Environmental Protection Agency, U.S. air quality has been improving for decades. EPA reports that nationally, air pollutant concentration levels have declined significantly since 1990¹⁶:

- Carbon Monoxide (CO) 8-Hour, 79%
- Lead (Pb) 3-Month Average, 85% (from 2010)
- Nitrogen Dioxide (NO₂) Annual, 61%
- Nitrogen Dioxide (NO₂) 1-Hour, 54%
- Ozone (O₃) 8-Hour, 21%
- Particulate Matter 10 microns (PM₁₀) 24-Hour, 32%
- Particulate Matter 2.5 microns (PM_{2.5}) Annual, 37% (from 2000)

¹⁴ U.S. Energy Information Agency, *Annual Energy Outlook 2022*, “[Oil and Gas Supply Module](#)”, Tables 1-3.

¹⁵ Institute for Energy Research, “[Global Oil and Gas Proved Reserves Increase in 2021](#)”, June 22, 2022.

¹⁶ U.S. Environmental Protection Agency, “Our Nation’s Air, Trends Through 2021,” <https://gispub.epa.gov/air/trendsreport/2022/#home> (accessed October 5, 2022).

- Particulate Matter 2.5 microns (PM_{2.5}) 24-Hour, 33% (from 2000)
- Sulfur Dioxide (SO₂) 1-Hour, 91%
- Numerous air toxics have declined with percentages varying by pollutant

By almost any measure, America's air quality is clean and getting cleaner. Thus, to argue that this regulatory action's alleged air quality benefits outweigh the substantial costs to American consumers is weak. The legitimacy of any policy, especially those that restrict Americans' ability to pursue their own happiness, requires policy makers to balance all of the costs and benefits of a particular action. Thus, a reasonable assessment of the impact on consumer choice, family finance, and broad inconvenience against the alleged air quality benefits should provide the Secretary adequate information to cease moving forward with the proposed standards.

The So-Called Social Cost of Greenhouse Gases Obscures Regulatory Costs

The Department of Energy argues that reductions in so-called greenhouse gas emissions provide additional justification for the proposed rule and uses a social cost of greenhouse gases calculation to monetize the alleged benefits even though it specifically states that its conclusions regarding GHG's bears no impact on its final analysis. Regardless, achieving accuracy in accounting for costs and benefits, even those that do not impact the final decision, is fundamentally important for providing the transparency that the Department of Energy is seeking to promote.

Regarding the proposed rule, the Department of Energy calls upon the social cost of carbon (SCC) for this cost/benefit analysis. The SCC is a highly flawed and dubious metric, which we have analyzed extensively at The Heritage Foundation. Their use and presentation of the metric only serves to create bias and misleads the public with cost/benefit calculations intended to provide transparency to the proposed rule.

At The Heritage Foundation, we have analyzed two of the integrated assessment models (IAMs) – the DICE and FUND models - used as the basis for this regulation by testing their robustness to a variety of fundamental assumptions. Our work, published both at The Heritage Foundation as well as in the peer-reviewed literature, has repeatedly demonstrated that although these models may provide interesting academic exercises, they are highly sensitive to changes to assumptions, and thus also highly prone to user manipulation.¹⁷ Below is some analysis excerpted from a recent

¹⁷Kevin D. Dayaratna and David W. Kreutzer, "Unfounded FUND: Yet Another EPA Model Not Ready for the Big Game," Heritage Foundation *Backgrounder* No. 2897, April 29, 2014, <http://www.heritage.org/research/reports/2014/04/unfounded-fund-yet-another-epa-model-not-ready-for-the-big-game> (accessed October 4, 2022); Kevin D. Dayaratna and David W. Kreutzer, "Loaded DICE: An EPA Model Not Ready for the Big Game," Heritage Foundation *Backgrounder* No. 2860, November 21, 2013, <http://www.heritage.org/research/reports/2013/11/loaded-dice-an-epa-model-not-ready-for-the-big-game> (accessed October 4, 2022); Kevin D. Dayaratna and David Kreutzer, "Environment: Social Cost of Carbon Statistical Modeling Is Smoke and Mirrors," *Natural Gas & Electricity*, Vol. 30, No. 12 (2014), pp. 7–11; K. Dayaratna, R. McKittrick, and D. Kreutzer, "Empirically Constrained Climate Sensitivity and the Social Cost of Carbon," *Climate Change Economics*, Vol. 8, No. 2 (2017), p. 1750006-1-1750006-12; Kevin D. Dayaratna, "An Analysis of the Obama Administration's Social Cost of Carbon," testimony before the Committee on Natural Resources, U.S. House of Representatives, July 23, 2015; and Kevin D. Dayaratna, "At What Cost? Examining the Social Cost of Carbon," testimony before the Committee on House, Sciences, and Technology, U.S. House of Representatives, February 28, 2017.

peer reviewed study (Dayaratna et al 2017) examining robustness to changes in assumptions regarding climate sensitivity. The analysis compared SCC estimates based on assumptions the Obama administration had made regarding climate sensitivity to that of more recent empirically-based literature.¹⁸ Although the study was published in 2017, it nevertheless remains relevant as these assumptions were a key flaw in the federal government’s prior attempts to formulate the SCC.

Table 2. Mean SCC estimates by year under four discount rates from the DICE model, for both the simulated (RB07) and empirical (LC15) ECS distributions. Last row shows the percent change as of 2020.

Discount rates	Mean SCC–DICE model							
	Using simulated ECS				Using empirical ECS			
	2.50%	3.00%	5.00%	7.00%	2.50%	3.00%	5.00%	7.00%
2010	\$46.58	\$30.04	\$8.81	\$4.02	\$23.62	\$15.62	\$5.03	\$2.48
2020	\$56.92	\$37.79	\$12.10	\$5.87	\$28.92	\$19.66	\$6.86	\$3.57
2030	\$66.53	\$45.15	\$15.33	\$7.70	\$33.95	\$23.56	\$8.67	\$4.65
2040	\$76.96	\$53.26	\$19.02	\$9.85	\$39.47	\$27.88	\$10.74	\$5.91
2050	\$87.70	\$61.72	\$23.06	\$12.25	\$45.34	\$32.51	\$13.03	\$7.32
% Chg at 2020					−49.2%	−48.0%	−43.3%	−39.2%

Table 4. Mean SCC estimates by year under four discount rates from the FUND model, for both the simulated (RB07) and empirical (LC15) ECS distributions. Last row shows the percent change as of 2020.

Discount rates	Mean SCC–FUND model							
	Using simulated ECS				Using empirical ECS			
	2.50%	3.00%	5.00%	7.00%	2.50%	3.00%	5.00%	7.00%
2010	\$29.69	\$16.98	\$1.87	−\$0.53	\$5.25	\$2.78	−\$0.65	−\$1.12
2020	\$32.90	\$19.33	\$2.54	−\$0.37	\$5.86	\$3.33	−\$0.47	−\$1.10
2030	\$36.16	\$21.78	\$3.31	−\$0.13	\$6.45	\$3.90	−\$0.19	−\$1.01
2040	\$39.53	\$24.36	\$4.21	\$0.19	\$7.02	\$4.49	−\$0.18	−\$0.82
2050	\$42.98	\$27.06	\$5.25	\$0.63	\$7.53	\$5.09	\$0.64	−\$0.53
% Chg at 2020					−82.2%	−82.8%	−118.5%	−197.3% ^a

^aChange from −\$0.37 to −\$1.10 is, arithmetically, a positive number, but is shown here as negative to indicate that it is a change to a larger negative magnitude.

Our analysis observed drastically lower estimates of the SCC using these more up-to-date ECS distributions. Furthermore, as also illustrated in the above analysis, the SCC can even become negative under very reasonable assumptions, and the associated policy implication there would be that carbon dioxide should not be taxed but instead subsidized. We do not take either position, but the sheer fact that the models can illustrate either under very reasonable assumptions is yet another example how these models are highly susceptible to user manipulation. This negativity, primarily due to impacts on agriculture, has been discussed at

¹⁸ Gerard H. Roe and Marcia B. Baker, “Why Is Climate Sensitivity So Unpredictable?” *Science*, Vol. 318, No. 5850 (October 26, 2007), pp. 629–632; Nic Lewis and Judith Curry, “The impact of recent forcing and ocean heat uptake data on estimates of climate sensitivity,” *The Journal of Climate* Vol 31, No 15 (2018), 6051–6071.

length in Dayaratna et al (2020).¹⁹ Dayaratna has concluded based on his years of research on the SCC that:

“Although the social cost of carbon is based on an interesting class of statistical models, no matter what estimate the Biden administration provides, the assumptions used to generate it can almost surely be manipulated to give lawmakers virtually any other (even negative) estimate of the social cost of carbon, thereby predicting anything, ranging from little warming and continued prosperity to catastrophic warming and immense disaster.”²⁰

Since the models used to estimate the SCC lack robustness to provide meaningful results, the use of the SCC in attempting to provide transparent cost/benefit analysis is only misleads and misinforms the public.

The Department of Energy argues that reductions in so-called greenhouse gas emissions provide additional justification for the proposed rule and uses a social cost of greenhouse gases calculation to monetize the alleged benefits even though it specifically states that its conclusions regarding GHG’s bears no impact on its final analysis. Given this acknowledgement, including the social costs of greenhouse gases is unnecessary and creates inappropriate bias. This problem is exacerbated by the fact that the social cost of carbon is a dubious metric to begin with and because the underlying statute makes no mention that climate change should be considered as part of any energy efficiency program.²¹

The Proposed Standard Unjustifiably Reduces Consumer Choice

Abundant energy availability and an improving air quality undermine any moral authority or policy justification for the proposed standard, which is justified by its alleged energy savings and environmental benefits.

This is not to argue that energy efficiency does not have economic value. It obviously does. However, that value is best determined by American consumers and businesses who are best positioned to calculate the value of long-term savings of greater efficiency against the near-term savings of less expensive products.

This is especially the case as Americans face crippling, historic inflation, a possible recession, and a stock market correction. This flexibility to assess economic tradeoffs is even more important to low-income Americans. According to the United States Office of Management and Budget, “some

¹⁹ K. Dayaratna, R. McKittrick, and P. Michaels, “Climate sensitivity, agricultural productivity and the social cost of carbon in FUND,” *Environmental Economics and Policy Studies*, Vol 22 (2020), p.433-448

²⁰K. Dayaratna “Why the Social Cost of Carbon is the Most Useless Number You’ve Never Heard of,” *The Daily Signal*, March 2, 2021. <https://www.heritage.org/energy-economics/commentary/why-social-cost-carbon-the-most-useless-number-youve-never-heard> (accessed October 4, 2022).

²¹ Katie Tubb, “Addressing Climate Change with Energy-Efficient and Resilient Housing,” Testimony before the Committee on Banking, Housing, and Urban Affairs, United States Senate, May 18, 2022, www.banking.senate.gov/imo/media/doc/Tubb%20Testimony%205-18-22.pdf (accessed October 4, 2022).

research indicates that energy efficiency regulations adversely affect lower-income consumers more than those who earn a higher income.²² Scholarly research shows further that, energy efficiency regulation hits lower income Americans harder than energy taxes²³, which are recognized as being generally regressive.²⁴

Indeed, marketplace choice, such as that presented by the furnace technologies in question, provides the precise sort of flexibility that American consumers depend on to manage home economic challenges.

Taken as accurate, the proposed standard's own analysis reports that consumers will take over 9 years to pay back the additional costs.²⁵ While such a payback period may make sense for some Americans—especially affluent populations--the fact is that many American families that continue to struggle through current economic challenges would be better served over the next decade having additional resources to provide food and housing for their families.

Though DOE's analysis of the proposed standard emphasizes the alleged benefits, the reported costs are significant at between \$524 million and \$536 million annually.²⁶ Of course, these are just averages and while DOE attempts to account for variability in installations costs, the fact is that given the extensive retrofitting that it necessary to convert from a non-condensing unit to a condensing one, some families will necessarily incur much greater costs than others.

This is a critical point when assessing how the proposed standard will affect individual Americans—especially those facing economic challenges. It will often be the case that converting from a noncondensing unit to a condensing one will require significant structural upgrades to allow for venting and condensate withdrawal as condensing units cannot use natural air flow for venting.

Many homes may have limited space that could be better utilized for other purposes or other costly challenges to overcome. For DOE to compel Americans to take on these costs or to degrade the livability of their homes for virtually no environmental benefit or meaningful energy savings (given the general availability of energy) is the pinnacle of Big Government paternalism.

Individual Americans are capable of weighing for themselves the value of additional efficiency against the additional costs associated with a furnace upgrade. Indeed, Americans are making those decisions, and many are opting for condensing furnaces, which makes imposing these costs on those who reach a contrary judgment even less rational and justified.

²² United States Office of Management and Budget, Office of Information and Regulatory Affairs, "2018, 2019, 2020 Report to Congress on the Benefits and Costs of Federal Regulations and Agency Compliance with the Unfunded Mandates Reform Act, P. 8-9, www.whitehouse.gov/wp-content/uploads/2021/01/2018_2019_2020-OMB-Cost-Benefit-Report.pdf (accessed October 4, 2022).

²³ Arik Levinson, "Energy Efficiency Standards are More Regressive Than Energy Taxes: Theory and Evidence," NBER Working Paper Series, Working Paper 22956, December 2016, www.nber.org/system/files/working_papers/w22956/w22956.pdf, (accessed October 4, 2022).

²⁴ William A. Pizer and Steven Sexton, "The Distributional Impacts of Energy Taxes," Review of Environmental Economics and Policy, January 2019, Volume 13, Number 1, pp. 104-123, www.journals.uchicago.edu/doi/epdf/10.1093/reep/rey021 (accessed October 4, 2022).

²⁵ <https://www.federalregister.gov/d/2022-13108>

²⁶ <https://www.federalregister.gov/d/2022-13108>

The Proposed Standards Are Unnecessary Given the Wide Availability of Condensing Furnaces and Their Existing Market Penetration

There is little question that the proposed standard will increase the near-term costs to American consumers, force American homeowners to renovate parts of their homes, limit consumer choice, cause greater market concentration, and have little if any environmental impact. But even if none of those things were true, the proposed standard is unnecessary because condensing furnaces are readily available in the marketplace and enjoy significant market penetration.

Indeed, where they may make the most sense, such as in the northeast, most new shipments are of the condensing variety. According to the Department of Energy's Technical Support Document:

Based on historical shipments of condensing furnaces from 2013-2020, DOE estimated that in 2020, the condensing NWGF market share is 58 percent nationally, 76 percent in the North and 34 percent in the Rest of Country.²⁷

What this should tell the Secretary is that Americans are aware of the costs and benefits of condensing furnaces and given that information, they are making purchases that best fit their individual circumstances.

For these reasons, we urge you, as allowed by the Energy Policy and Conservation Act to resist imposing any new standards on the American consumer. Doing nothing will allow the United States to move toward the Department of Energy's goal of reaching higher efficiency levels as consumers choose to continue to purchase condensing furnaces while simultaneously allowing American citizens to meet their goals of heating their homes in the way that best meets their individual needs.

The Proposed Standard Does Not Meaningfully Fulfil the Intent of the Energy Policy and Conservation Act

While six of the seven factors prescribed to the Secretary identify specific variables to consider when determining the economic justification of new or amended standards, factor number 7 is more open ended. It states that the Secretary should consider "other factors the Secretary considers relevant."

One factor to consider is how does the proposed standard meaningfully advance EPCA's intent given the abundant energy sources that the United States enjoys today that were not contemplated in 1975?

²⁷ Department of Energy, "Technical Support Document: Energy Efficiency Program for Consumer Products and Commercial and Industrial Equipment. Consumer Furnaces," p. 8 | 5, June 2022.

Congress clearly placed a high priority on maintaining a robust, competitive furnace market and protecting consumer choice when contemplating the EPCA. This is demonstrated throughout the Act, as detailed above, by virtue, among other things, of the factors it put in place for the Secretary to consider when determining efficiency standards. Nonetheless, given fears of energy scarcity, Congress decided to move forward with Act.

Indeed, the 1975 Energy Policy and Conservation Act was born out of time of perceived energy scarcity. In justifying the policies that the Act ultimately set in place, President Gerald Ford laid out three broad policy objectives. These included reducing oil imports, ending American vulnerability to economic disruption by foreign suppliers, and developing energy technology and resources to supply a significant share of the free world's energy needs.²⁸

In each case, the United States has achieved President Ford's objectives. In 1975, net imports of crude oil exceeded 5 million barrels per day. By 2020, the United States had become a net exporter.²⁹ Geopolitical shocks and cartels, specifically the Organization of Petroleum Exporting Countries (OPEC), which produces about 40 percent of the world's crude oil, can still have a near-term impact on American energy prices. However, due to the large amount of energy on global markets, energy disruptions do not present the sort of systemic threat that policy makers feared in the 1970's. The extent to which the United States economy remains vulnerable is purely a function of energy restriction policies and have nothing to do with energy efficiency. And finally, American technologies like fracking and commercial nuclear reactors are helping to power modern economies around the world. Again, to the extent that energy remains scarce is purely a function of policies that restrict access to American resources or prevent the export of peaceful technologies.

Thus, while efficiency certainly remains an important piece of the energy calculation for American consumers, it is no longer something that needs to be imposed at the systemic level. Instead, it is something that Americans should determine for themselves at the household and business levels.

Though the 1975 efficiency Act clearly authorizes the Department of Energy to place restrictions on industry and consumer choice at the behest of the Secretary of Energy, the Department should recognize that the environment that gave rise to the Act has changed drastically given advances in technology and energy discovery. While this does not diminish the authority of the Secretary to impose standards, it does dramatically diminish the impact of those standards relative to the overall purpose of the Act, which is to secure adequate energy resources for the American economy. In other words, saving a slice of a small pie has much more impact than saving the same size slice of a much larger pie. As detailed above, the United States has hundreds of years of known energy reserves and new technology is allowing for new discoveries and more efficient use of existing reserves all the time.

Further, appliances of all sorts, including furnaces, are becoming more efficient. While the consuming public considers many attributes of the purchases they make, including capability and

²⁸ President Gerald R. Ford's Address Before a Joint Session of Congress Reporting on the State of the Union, January 15, 1975 ([Gerald Ford's 1975 State of the Union Address \(fordlibrarymuseum.gov\)](https://www.fordlibrarymuseum.gov)).

²⁹ United States Department of Energy, Energy Information Agency, "Oil and petroleum products explained," ([Oil imports and exports - U.S. Energy Information Administration \(EIA\)](https://www.eia.gov), accessed October 3, 2022).

upfront cost, efficiency is clearly something the American consumer values. Indeed, as energy becomes more expensive, the value of the efficiency in a free market will most assuredly increase. If energy prices are low, American consumers do not need the Secretary of Energy to force them to purchase certain products based on efficiency.

Put succinctly, the value proposition for energy efficiency has shifted dramatically since 1975 due to the broad availability of energy. Thus, forcing Americans to purchase certain products based on efficiency within an environment of energy abundance no longer has the same impact on energy availability as it did during times of perceived energy scarcity. Thus, the proposed standards do not meaningfully advance the intent of EPCA and does not justify the restrictions the proposed rule will impose on American consumer choice.

Conclusion

Thank you for the opportunity to comment on this important proposed regulatory action.

While the Energy Policy and Conservation Act may well authorize the Department of Energy to review furnace efficiency standards, it does not force the Secretary to needlessly ratchet up regulatory compliance and associated costs just because she can.

This question is of extreme importance as American families and businesses face rising costs throughout the economy, especially for energy broadly and home appliances specifically. As the facts show, furnace efficiency is increasing without additional regulation, and the DOE's preferred technology has secured its place in the furnace market. Taking this action now will not improve efficiency but will cost Americans dearly. And that is why we ask the Secretary of Energy to pause, if not abandon, this effort.

Sincerely,

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