



U.S. CHAMBER OF COMMERCE



November 12, 2013

VIA ELECTRONIC FILING AND ELECTRONIC MAIL

U.S. Department of Energy
Office of Energy Efficiency and Renewable Energy
Building Technologies Program, EE-2J
1000 Independence Ave. SW
Washington, D.C. 20585-0121
Attn: Brenda Edwards (CRE-2010-STD-0003@ee.doe.gov)

**Re: Docket No. EERE-2010-BT-STD-0003: Energy Conservation Program:
Energy Conservation Standards for Commercial Refrigeration Equipment;**

**Proposed Rule; Federal Register Vol. 78, Number 176 (Wednesday,
September 11, 2013); RIN 1904-AC19**

Dear Sir/Madam:

The U.S. Chamber of Commerce, American Forest & Paper Association, American Fuel & Petrochemical Manufacturers, American Petroleum Institute, Council of Industrial Boiler Owners, National Association of Manufacturers, National Mining Association, and Portland Cement Association (collectively, the “Associations”) offer these comments on the Department of Energy (“DOE”)’s proposed rule for Energy Conservation Standards for Commercial Refrigeration Equipment, 78 F.R. 55890 (September 11, 2013) (“Commercial Refrigeration Equipment Proposed Rule” or “Proposed Rule”). For the reasons discussed below, the Associations believe that the “social cost of carbon” (“SCC”) should be withdrawn as a basis for the Commercial Refrigeration Equipment Proposed Rule, and that the SCC calculation should not be used in any rulemaking and/or policymaking until it undergoes a more rigorous notice, review and comment process as outlined below.

The **U.S. Chamber of Commerce** (“Chamber”) is the world’s largest business federation, representing the interests of more than three million businesses and organizations of all sizes, sectors, and regions, as well as state and local chambers and industry associations, and dedicated to promoting, protecting, and defending America’s free enterprise system.

The **American Forest & Paper Association** (“AF&PA”) serves to advance a sustainable U.S. pulp, paper, packaging, and wood products manufacturing industry through fact-based public policy and marketplace advocacy. AF&PA member companies make products essential for everyday life from renewable and recyclable resources and are committed to continuous improvement through the industry’s sustainability initiative - [*Better Practices, Better Planet 2020*](#). The forest products industry accounts for approximately 4.5 percent of the total U.S. manufacturing GDP, manufactures approximately \$200 billion in products annually, and employs nearly 900,000 men and women. The industry meets a payroll of approximately \$50 billion annually and is among the top 10 manufacturing sector employers in 47 states. AF&PA’s sustainability initiative - *Better Practices, Better Planet 2020* - is the latest example of our members’ proactive commitment to the long-term success of our industry, our communities and our environment. We have long been responsible stewards of our planet’s resources. Our member companies have collectively made significant progress in each of the following goals, which comprise one of the most extensive quantifiable sets of sustainability goals for a U.S. manufacturing industry: increasing paper recovery for recycling; improving energy efficiency; reducing greenhouse gas emissions; promoting sustainable forestry practices; improving workplace safety; and reducing water use.

The **American Fuel & Petrochemical Manufacturers** (“AFPM”) is a trade association representing high-tech American manufacturers of virtually the entire U.S. supply of gasoline, diesel, jet fuel, other fuels and home heating oil, as well as the petrochemicals used as building blocks for thousands of vital products in daily life. AFPM members make modern life possible

and keep America moving and growing as they meet the needs of our nation and local communities, strengthen economic and national security, and support 2 million American jobs.

The **American Petroleum Institute** (“API”) is a national trade association representing over 500 member companies involved in all aspects of the oil and natural gas industry. API’s members include producers, refiners, suppliers, pipeline operators, and marine transporters, as well as service and supply companies that support all segments of the industry. API and its members are dedicated to meeting environmental requirements, while economically developing and supplying energy resources for consumers.

The **Council of Industrial Boiler Owners** (“CIBO”) is a broad-based association of industrial boiler owners, architect-engineers, related equipment manufacturers, and University affiliates with members representing 20 major industrial sectors. CIBO members have facilities in every region of the country and a representative distribution of almost every type of industrial, commercial and institutional (ICI) boiler and fuel combination currently in operation. CIBO was formed in 1978 to promote the exchange of information within the industry and between industry and government relating to energy and environmental equipment, technology, operations, policies, law and regulations affecting industrial boilers. Since its formation, CIBO has been active in the development of technically sound, reasonable, cost-effective energy and environmental regulations for industrial boilers. CIBO supports regulatory programs that provide industry with enough flexibility to modernize -- effectively and without penalty - the nation's aging energy infrastructure, as modernization is the key to cost-effective environmental protection.

The **National Association of Manufacturers** (“NAM”) is the largest industrial trade association in the U.S., representing over 12,000 small, medium and large manufacturers in all 50 states. NAM is the leading voice in Washington, D.C., for the manufacturing economy, which provides millions of high wage jobs in the U.S. and generates more than \$1.6 trillion in GDP. In addition, two-thirds of NAM members are small businesses, which serve as the engine for job growth. NAM’s mission is to enhance the competitiveness of manufacturers and improve American living standards by shaping a legislative and regulatory environment conducive to U.S. economic growth.

The **National Mining Association** (“NMA”) is a national trade association whose members produce most of America’s coal, metals, and industrial and agricultural minerals. Its membership also includes manufacturers of mining and mineral processing machinery and supplies, transporters, financial and engineering firms, and other businesses involved in the nation’s mining industries. NMA works with Congress and federal and state regulatory officials to provide information and analyses on public policies of concern to its membership, and to promote policies and practices that foster the efficient and environmentally sound development and use of the country’s mineral resources.

The **Portland Cement Association** (“PCA”) represents 26 U.S. cement companies operating 79 manufacturing plants in 34 states. Accounting for 78% of domestic cement-making

capacity, PCA members operate distribution centers in all 50 states and nearly every congressional district.

These Associations' members have a strong interest in this Proposed Rule because they may be impacted by the SCC precedent set in the rulemaking given that many of them manufacture products that, when combusted, result in greenhouse gas ("GHG") emissions (including carbon dioxide ("CO₂")), and because, in the course of their business, they emit CO₂. Should this Administration, or any subsequent one, promulgate further regulation of these products or emissions, such proposals and rules could potentially be based, in large part, on either the 2010 or 2013 estimates of the SCC ("SCC Estimates") created by the federal Interagency Working Group ("IWG"). Therefore, the Associations' members have a direct and meaningful interest in ensuring that any estimates and applications of the SCC are based on transparent processes, accurate information, rational assumptions, and are within the reach of the current scientific understanding and impact models.¹

I. THE SCC SHOULD UNDERGO A NOTICE AND COMMENT PROCESS BEFORE IT IS USED IN THE COMMERCIAL REFRIGERATION EQUIPMENT PROPOSED RULE OR ANY OTHER RULEMAKINGS.

The IWG has defined the SCC as "an estimate of the monetized damages associated with an incremental increase in carbon emissions in a given year." In the Commercial Refrigeration Equipment Proposed Rule, the DOE uses benefits derived from the SCC to justify the proposed energy efficiency regulation. The DOE estimates that the Proposed Rule will have cumulative benefits of \$7.6 billion over a 30-year period (2017-2046) at a 3% discount rate. Of that \$7.6 billion in benefits, \$6.0 billion is from lower consumer electricity costs, \$1.5 billion is from the SCC, and \$50 million is from reduced NO_x emissions. The DOE also estimates that the Proposed Rule will have cumulative costs of \$1.9 billion. Notably, under Title III of the Energy Policy and Conservation Act (42 U.S.C. 6295), the DOE's findings with regard to the benefits of the Commercial Refrigeration Equipment Proposed Rule are legally sufficient for justifying the rule without the inclusion of any benefits based upon the SCC.

While the DOE may include SCC benefits in claiming that the Commercial Refrigeration Equipment Proposed Rule has benefits of \$7.6 billion, that does not change the fact that the IWG's SCC analysis has not been adequately noticed and reviewed before being used in this Proposed Rule or any other rulemaking. As described in the attached Petition for Correction pursuant to the Information Quality Act, the Associations believe that the 2010 and 2013 Technical Support Documents and SCC Estimates should be withdrawn and not used in any rulemaking and policymaking, including the Commercial Refrigeration Equipment Proposed Rule, for the following reasons:

¹ To be clear, we question the application of the 2010 and 2013 Interagency Working Group ("IWG") estimates of the SCC, which are based on complex economic impacts hundreds of years in the future, which in turn are based on present day understanding of current and future carbon emissions. We are not herein discussing the existence or potential causes of climate change.

1. The SCC Estimates fail in terms of process and transparency. The SCC Estimates fail to comply with OMB guidance for developing influential policy-relevant information under the Information Quality Act.² The SCC Estimates are the product of an opaque process and any pretensions to their supposed accuracy (and therefore usefulness in policy-making) are unsupportable.
2. The models with inputs (hereafter referred to as “the modeling systems”) used for the SCC Estimates and the subsequent analyses were not subject to peer review as appropriate.
3. Moreover, even if the SCC Estimate development process was transparent, rigorous, and peer-reviewed, the modeling conducted in this effort does not offer a reasonably acceptable range of accuracy for use in policymaking.
4. The IWG has failed to disclose and quantify key uncertainties to inform decision makers and the public about the effects and uncertainties of alternative regulatory actions as required by OMB.
5. By presenting only global SCC estimates and downplaying domestic SCC estimates in 2013, the IWG has severely limited the utility of the SCC for use in benefit-cost analysis and policymaking.

Given all of the concerns summarized above and detailed in the attached petition, neither the 2010 nor 2013 IWG estimates of SCC should be used in the Commercial Refrigeration Equipment Proposed Rule, as well as any other rulemaking and policymaking until the SCC undergoes a more rigorous notice, review and comment process.³

II. THE COMMERCIAL REFRIGERATION EQUIPMENT PROPOSED RULE IS FLAWED IN OTHER SIGNIFICANT WAYS

The problems with the Commercial Refrigeration Equipment Proposed Rule go beyond the transparency and process problems associated with the SCC, which the DOE relied upon in its cost-benefits analysis.⁴ As outlined below, there are other errors and omissions in the DOE’s cost-benefit analysis that must be addressed.

² The SCC Estimates also fail to comply with the OMB Bulletin for Agency Good Guidance Practices, which requires pre-adoption public notice and comment for economically significant guidance documents. *See* OMB Bulletin, 72 F.R. at 3440 (Sec. IV).

³ Notably, on November 1, 2013, the Administrator of the Office of Management and Budget announced that OMB was “issuing updated values for the Social Cost of Carbon” and that OMB’s OIRA would “provide a new opportunity for public comment on the [SCC] estimates.” *See* Howard Shelanski, Adm’r, Office of Information and Regulatory Affairs, Office of Management and Budget, “Refining Estimates of the Social Cost of Carbon,” Nov. 1, 2013, available at <http://www.whitehouse.gov/blog/2013/11/01/refining-estimates-social-cost-carbon>.

⁴ In using the SCC Estimates, the DOE also fails to adhere to its own guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information disseminated by the DOE. For example, at the direction of OMB and pursuant to Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001, the DOE implemented guidelines on October 1, 2002 aimed at ensuring the quality of information that it

A. The DOE Improperly Balances Costs and Benefits

An important principle of cost-benefit analysis is that costs and benefits must be compared over the same time frame and within the same scope. The DOE's cost-benefit analysis for the Proposed Rule violates this principle in both ways. With respect to the time frame, the DOE calculates the present value of the costs of the Proposed Rule to consumers and manufacturers over a **30-year** period. In contrast, the annual SCC estimates used in the DOE's cost-benefit analysis reflect cumulative benefits that will accrue to individuals up to **300 years** in the future. According to the DOE analysis, the Commercial Refrigeration Equipment energy efficiency standards would lead to the removal of 54.88 million metric tons of greenhouse gases (GHGs) over 30 years (2017-2046),⁵ which in turn would avoid global warming damages and result in benefits over the next 300 years. The DOE's comparison of 30 years of cost to 300 hundred years of putative, future benefits is inconsistent and improper.⁶

The DOE cost-benefit analysis also fails to balance the scope of costs and benefits. Regulations result in both direct and indirect costs and benefits. Direct costs are the costs of compliance immediately imposed by the regulation on the regulated entities, i.e. higher manufacturing and consumer costs for commercial refrigeration equipment. Direct benefits include any economic or health costs that would accrue immediately to the public from the greater efficiency of commercial refrigeration equipment, i.e. lower operating costs from improved energy efficiency of the commercial refrigeration equipment. Indirect costs would include the secondary and tertiary effects that would be induced by the regulation. Here, the DOE expands its benefits calculations to include indirect benefits without commensurately expanding its cost analysis to include potential indirect costs. For example, the DOE analysis includes benefits based upon the SCC, which would be classified as indirect benefits; however, it does not take into account indirect costs, such as income loss and job search costs imposed on workers who might be displaced because of higher prices for new commercial refrigeration equipment and their components, and reduced product demand. The DOE analysis for the Proposed Rule should be balanced in the scope and time frame of any costs and benefits.

disseminates. The OMB guidelines sought to "provide policy and procedural guidance to Federal Agencies for ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by Federal Agencies." *See also* DOE Final Report Implementing OMB Information Dissemination Quality Guidelines, at 26-27 (2002) ("[w]here feasible, data should have full, accurate, transparent documentation, and possible sources of error affecting data quality should be identified and disclosed to users....").

⁵ *See* 78 F.R. No. 176, p. 55893.

⁶ Although the DOE presents carbon reduction values for each year of the 30-year period over which costs and benefits are compared, the presentation is not complete. For example, the amount of \$43 per ton that is listed in Table IV-18 of the Proposed Rule (see page 55845) is not the actual direct benefit in terms of the economic damages avoided by eliminating a ton of carbon in the year 2020. Instead, it is the present value in 2020 (calculated at a 3% discount rate) of the projected economic damage avoided over the future 300 years by all person in all places worldwide if the subject ton of carbon eliminated in 2020 remains out of the emissions stream for all time forward.

B. The DOE Ignores Global Benefits Reduction Rate

In justifying the benefits of the Commercial Refrigeration Equipment Proposed Rule, the DOE ignores a recommendation from the IWG to reduce global benefits from the SCC in the context of wholly domestic regulations. In relying upon the SCC in its cost-benefit analysis, the DOE recognizes the benefits of reduced global CO₂ emissions resulting from the Proposed Rule, but it fails to consider the correlating global costs of the Proposed Rule. According to the IWG, the U.S. domestic SCC benefits for the reduction of one ton of CO₂ amount to only 7% - 23% of the global SCC benefits for the reduction of the same ton of CO₂. In its proposed Energy Conservation Standards for Metal Halide Lamp Fixtures, the DOE acknowledged the IWG's recommendation, by stating that "...the interagency group determined that a range of values from 7 percent to 23 percent should be used to adjust the global SCC to calculate domestic effects, although DOE will give preference to consideration of the global benefits of reducing CO₂ emissions."⁷

By ignoring the IWG's recommendation and failing to apply a reduction rate for the global SCC benefits, the DOE's estimate of carbon-reduction benefits for the Proposed Rule is 4 to 14 times greater than it would have been if the DOE had followed the IWG's recommendation. In other words, the domestic SCC benefits for the Proposed Rule would be only \$105 million to \$246 million under the IWG's recommendation, instead of the \$1.5 billion claimed by the DOE based on the global benefits perspective. The DOE's decision to depart from the IWG approach on this issue, with no justification or reasoning, renders it arbitrary.

C. The DOE Fails to Consider EPA's Planned GHG Regulations on Power Plants

The DOE also fails to take into account in the Proposed Rule the Environmental Protection Agency ("EPA")'s planned GHG regulations for new and existing power plants. In the President's highly publicized Climate Action Plan, which was released on June 25, 2013, the White House directed EPA to propose and issue regulations reducing GHG emissions from new and existing power plants. The Climate Action Plan and accompanying Presidential memorandum outlined detailed rulemaking schedules for both new and existing power plants. Specifically, EPA would propose regulations for GHG emissions from new power plants by September 20, 2013, and similar regulations for existing power plants by June 1, 2014. EPA already fulfilled the first directive by releasing a proposed regulation for GHG emissions from new power plants on September 20, 2013. Given the Agency's simultaneous announcement that it would undertake a two-month outreach to stakeholders on the existing power plant rule, all indications are that EPA will fulfill the second directive, too.

Despite all of the publicity and media coverage surrounding the Climate Action Plan and EPA's strong suggestions that it would adhere to the President's directives, the DOE fails to consider the impact of EPA's planned GHG power plant regulations on the Commercial Refrigeration Equipment Proposed Rule. This is significant because EPA's planned GHG

⁷ See http://www1.eere.energy.gov/buildings/appliance_standards/commercial/pdfs/mhlf_preanalysis_chapter2.pdf, Preliminary Technical Support Document, p. 64 for Docket No. EERE-2009-BT-STD-0018, Energy Conservation Standards for Metal Halide Lamp Fixtures, 78 F.R. 161 (Aug. 20, 2013).

regulations for new and existing power plants likely will materially affect the projections of CO₂ emissions reductions on which the DOE's SCC-derived benefit calculations are based. The DOE's projections of baseline CO₂ emissions over the 2017-2046 timeframe assume the continuation of existing patterns of electricity generation by fuel types. It is well known, however, that EPA's planned GHG regulations on power plants, as well as other existing and proposed regulations, such as the Mercury and Air Toxics Standards, can be reasonably expected to change the baseline pattern of energy generation, including the types of fuels used for electricity generation and the extent to which they are used. Consequently, in failing to consider EPA's planned GHG regulations on power plants, the DOE's projections of CO₂ emissions reductions from the Commercial Refrigeration Equipment Proposed Rule are likely invalid.

This example highlights a significant problem with the application of SCC-derived benefit calculations by regulatory agencies. When different agencies are simultaneously pursuing regulatory agendas that address similar sources of CO₂ emissions, the likelihood of double-counting of the same putative SCC benefits is high. The result may be to promote excessive and economically unjustified regulations because the actual benefits have been overestimated by duplicative emissions reduction claims. Both the DOE and EPA should not take credit for removing the same ton of CO₂, and neither agency should claim benefits from the removal of that same ton in more than one of its own regulations. Indeed, the potential effects of EPA's planned GHG regulations on power plants very well may overwhelm any emissions reduction claims that DOE may project for its energy efficiency standards. Consequently, the DOE's failure to consider EPA's planned GHG regulations on power plants, as well as other related emissions-reducing regulations,⁸ is a significant flaw in its analysis for the Proposed Rule.

D. The DOE Incorrectly Used the IWG's Analysis Showing Increasing SCC Estimate Values for Future Years

In its cost-benefit analysis for the Commercial Refrigeration Equipment Proposed Rule, the DOE incorrectly used information from the 2013 IWG Technical Support Document, which lead to an overestimation of the claimed benefits from the Proposed Rule. Essentially, DOE used the IWG's increasing SCC estimates over time to calculate benefits from the Proposed Rule, but failed to account for the fact that those increasing values do not anticipate any policy changes or changing emissions trends over time.

⁸ On June 7, 2013, EPA published a proposed regulation establishing new and more stringent effluent limitation guidelines and standards for the steam electric generating point source category. 78 FR No. 110, p. 34432. EPA claimed that the new guidelines would create SCC-derived benefits of \$127.6 million per year (at a 3% discount rate) because the guidelines would lead to the closure of coal-fueled steam plants and the substitution of electric generating sources that produce less CO₂ emissions. EPA claimed that the new guidelines would result in \$3.8 billion in cumulative CO₂ emissions reduction benefits over a 30-year period. 78 FR No. 110, p. 34516-17. Given that there very well may be overlapping emissions reduction benefits between the EPA effluent limitation guidelines and the DOE's Commercial Refrigeration Equipment Proposed Rule, DOE should be considering the EPA guidelines in its analysis of the Proposed Rule.

In its analysis, the DOE calculated benefits for the reduction of CO₂ emissions for each year from 2017 through 2046. Although the Proposed Rule's projected emissions reduction is the same for each year – about 9.9 million tons – the benefit amounts rise significantly over the same period because the DOE multiplies each year's emissions reduction amount by a higher SCC estimate. Those SCC estimates are derived from the IWG's 2013 table of SCC estimates from 2010-2050.⁹ For example, the SCC estimate for a ton of CO₂ added to or removed from the global atmospheric inventory is \$33 in 2010, \$43 in 2020, and \$66 in 2045.¹⁰

The DOE's use of the increasing SCC estimates from the IWG's 2013 table is problematic because those values only describe the SCC estimate for a one-time change in the specified year, without accounting for any prior changes from the baseline emissions trend in earlier years. For example, the 2045 value of \$66 estimates the value of a ton of CO₂ if there have been no policy changes or new regulations impacting carbon emissions until 2045.¹¹ The value of \$66, therefore, is not the correct value to apply for 2045 if the emissions reduction for that year has been preceded by emissions reductions in each prior year since 2017, as is the case with the policy intervention that is proposed by the DOE Commercial Refrigeration Equipment Proposed Rule.

The result of continuing the standard in effect in 2045, after having already been in effect since 2017, would translate into a smaller benefit estimate per ton than \$66. The benefit would be smaller because the alleged future damage of a ton of CO₂ in 2045 would have been reduced by the effect of the tons removed in prior years. Consequently, the DOE's misuse of the SCC estimates from the IWG's 2013 table in its cost-benefit analysis resulted in the Department overestimating the claimed benefits from the Commercial Refrigeration Equipment Proposed Rule.¹²

III. CONCLUSION

For the reasons stated above, including the incorporation of the arguments posited in the attached Petition, the DOE should withdraw the SCC calculation as a basis for the Commercial Refrigeration Equipment Proposed Rule, and refrain from using the SCC in any other rulemaking or policymaking until the SCC undergoes a more rigorous notice, review and comment process. Additionally, the DOE should address and correct the errors outlined in Section II of these comments.

⁹ See "Revised Social Cost of CO₂, 2010 – 2050" Table from the Interagency Working Group's "Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866," May 2013, p. 3.

¹⁰ *Id.* These estimates are based upon a 3% discount rate.

¹¹ See IWG, "Technical Support Document: Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866," February 2010, pp. 24-25, for a detailed description of the calculation procedure.

¹² To address this problem, the IWG could re-run the integrated assessment models which underlie the SCC calculations to reflect policies that begin in various years to remove a ton of CO₂ from the baseline and continue to do so annually thereafter. This corrected procedure likely would yield a table that could be used to analyze the benefits of policies that begin at certain years and continue steadily thereafter.

U.S. Department of Energy

November 12, 2013

Page 10 of 10

Thank you for the opportunity to participate in this proceeding. If you have any follow up questions regarding these comments, please feel free to reach out to William L. Kovacs, Senior Vice President of Environment, Technology & Regulatory Affairs at the U.S. Chamber of Commerce at (202) 463-5457 or by e-mail: wkovacs@uschamber.com.

American Forest & Paper Association

American Fuel & Petrochemical Manufacturers

American Petroleum Institute

Council of Industrial Boiler Owners

National Association of Manufacturers

National Mining Association

Portland Cement Association

U.S. Chamber of Commerce