Comments by the Energy Future Coalition

Key Elements for Clean Energy Standard Proposals

1. ***What should be the threshold for inclusion in the new program?***

In the RES contained in S. 1462 last Congress, utilities selling four million megawatt hours or more of retail electric power in a calendar year would have been subject to the mandate. Additionally, the State of Hawaii was specifically excluded from the program's requirements. The President's CES proposal does not appear to contain a threshold for inclusion, which means that all electric utilities, regardless of size, would be responsible for meeting any new requirements imposed by a CES.

Key Questions:

- *Should there be a threshold for inclusion or should all electric utilities be subject to the standards set by a CES?*

The CES should apply to all electric utilities, subject to reasonable accommodation to prior contractual obligations and provided a trading mechanism exists to enable use of the lowest-cost resources.

- *Should any states or portions of states be specifically excluded from the new program's requirements?*

No. As discussed more fully below, in addition to clean energy resources, energy efficiency options are available in every state to meet the standard.

- *How should a federal mandate interact with the 30 existing state electricity standards?*

The federal standard should not preempt any higher state standard, but should constitute a national minimum standard. Clean energy should be creditable toward both federal and state requirements.

2. ***What resources should qualify as "clean energy"?***

The definition of what qualifies as "clean energy" will be crucial in determining the overall mix of technologies deployed to comply with a CES. While previous CES proposals have gone beyond the narrow set of renewable technologies allowed under a RES, by including nuclear plants and coal plants with carbon capture and storage (CCS), the President's proposal also seeks to allow efficient natural gas without CCS to count towards compliance. While past proposals have credited energy efficiency measures to varying degrees, the President's CES proposal does not give clean energy credits for energy efficiency measures.

Key Questions:

- *On what basis should qualifying "clean energy" resources be defined? Should the definition of "clean energy" account only for the greenhouse gas emissions of electric generation, or should other environmental issues be accounted for (e.g. particulate matter from biomass combustion, spent fuel from nuclear power, or land use changes for solar panels or wind, etc.)?*

For simplicity's sake, the Clean Energy Standard should be based on the basis of greenhouse gas emissions alone. Incorporating other environmental factors into the calculation would create a burdensome record-keeping and monitoring exercise.

- *Should qualifying clean energy resources be expressly listed or based on a general emissions threshold? If it is determined that a list of clean energy resources is preferable, what is the optimal definition for "clean energy" that will deploy a diverse set of clean generation technologies at least cost? Should there be an avenue to qualify additional clean energy resources in the future, based on technological advancements?*

Credit under the Clean Energy Standard should be based on greenhouse gas emissions relative to the current fleet average for a coal-burning power plant. The percentage of a full credit that is provided should equal the percentage emission reduction below that average. Any incremental reduction in current energy demand achieved by a demonstrated investment in energy efficiency should also qualify, as spelled out below.

- *What is the role for energy efficiency in the standard?*

Energy efficiency should be fully included in a Clean Energy Standard without any arbitrary maximum or cap, provided it is duly measured and verified and represents incremental reductions to energy consumption as of the date of enactment of the standard.

Improving energy productivity is by far the lowest-cost, largest, quickest, and cleanest way to meet clean energy goals. By reducing waste, efficiency gains increase energy supply, directly addressing the energy security and resource adequacy concerns that compound the overall energy policy dilemma.

Significant energy efficiency gains supported U.S. economic growth in recent decades while avoiding the increases in energy production that were previously assumed to be necessary. But substantial opportunities remain, as shown in recent studies by the National Academy of Sciences, the American Council for an Energy-Efficient Economy, and the McKinsey Global Institute.

Efficiency improvements are available everywhere, can be implemented immediately using on-the-shelf technologies, and provide a number of economic benefits. Achieving efficiency gains

is labor-intensive and creates new jobs at the skill levels many unemployed Americans possess.[1] By reducing end-use energy costs, these gains will strengthen the productivity of the U.S. economy, and reduced demand will lower energy prices across the board.

As the only incremental clean energy resource that offers a cost per kilowatt of incremental capacity well below the current average cost of electricity generation, including energy efficiency in a Clean Energy Standard as a clean energy resource on an unlimited basis will not only reduce the cost of a Clean Energy Standard, it could indeed lead to a net savings for American ratepayers.

Some have suggested that energy efficiency should be addressed through separate policies that somehow provide equal or appropriately balanced policy support. However, as once noted in a different policy context, separate but equal is inherently unequal. Not to include energy efficiency in the same policy with clean energy production alternatives on an apples-to-apples basis would inevitably prevent competitive market forces from channeling resources toward the most effective compliance strategies. Since a modest investment in energy efficiency can provide equivalent clean energy while offsetting the need for a much greater investment in new production, efficiency must be incorporated into any policy structure that rewards clean energy supply.

The Clean Energy Standard will not be met by energy efficiency alone. Indeed, far from crowding out renewable energy alternatives, inclusion of energy efficiency can enable the inclusion of alternatives with higher-than-average costs of generation because the savings from efficiency will help bring down the overall cost. Many renewable energy technologies are available now and will be part of any utility's compliance strategy. A straight-line CES trajectory, as recommended below, will create demand for these technologies and enable them to achieve remaining economies of scale in manufacturing, installation, and accommodation on the grid.

Energy efficiency also has its challenges. Implementation requires hundreds of millions of individual decisions by consumers who are primarily motivated by other considerations than energy use, and those decisions can result in large transaction costs. State regulation typically rewards utility power sales but not utility services that diminish power sales. Efficiency improvements entail up-front capital costs, paid back in diminished energy operating costs over time. Often there are institutional divides between who pays and who benefits – e.g., in organizations where those paying the utility bills and those responsible for upgrading facilities have no relationship, in buildings where landlords are responsible for capital investments and tenants for operating costs, and in new construction where builders make the initial capital investments and buyers assume the operating costs. These challenges merit policy responses at the state level that would be expedited by inclusion of efficiency in a CES.

- *If energy efficiency qualifies, should it be limited to the supply side, the demand side, or both?*

[1] On a national basis, investing a million dollars in construction and services (sectors where energy efficiency jobs are concentrated) produces 19-20 jobs on average while investing a million dollars in the energy sector produces only 10 jobs on average, according to the American Council on an Energy Efficient Economy.

The environmental benefits of energy efficiency are multiplied by the fact that end-use energy efficiency offsets *delivered* energy, downstream of conversion losses at the power plant. Saving one unit of delivered electricity displaces approximately three units of primary energy from coal, for example, and thus three units of emissions. Since coal-based electricity is judged on the basis of its emissions per kilowatt-hour produced (not primary energy consumed), end-use efficiency should not receive triple credit, however; efficiency gains at the power plant should be rewarded based simply on the reductions of emissions.

- *How should measurement and verification issues be handled?*

Energy efficiency requires rigorous measurement and verification (M&V) against a baseline of actual historic consumption, or against projected incremental consumption that could otherwise occur and be perfectly legal and consistent with normal practices. Such M&V practices have been developed and operated in a number of state contexts[2] that can serve as models for a federal standard, although the actual M&V should probably be undertaken by state and local entities that regulate utilities.

Utilities have direct relationships with all consumers, and can offer reasonable incentives for landlords and builders that can be recovered from ratepayers over time with appropriate oversight. They can readily contract with energy efficiency service providers, achieve volume discounts on large purchases of energy-efficient equipment or materials to pass through to customers, and, in a growing number of jurisdictions, earn an appropriate return on their own investments and personnel services by their regulators.

- *Should retrofits or retirements of traditional fossil-fuel plants be included in the standard?*

No. The retirement or retrofit of power plants will be reflected either in the efficiency investments that made that step possible or in the replacement supply.

- *Should the standard be focused solely on electricity generation, or is there a role for other clean energy technologies that could displace electricity, such as biomass-to-thermal energy?*

The CES should be solely focused on electricity generation, but should recognize clean electricity generated from waste heat – for example, produced by an industrial facility – based on the fuel source of that thermal energy. Attempting to award clean energy credits for direct thermal energy applications that do not generate electricity would unduly broaden the Clean Energy Standard program and take it beyond the ability of utilities to serve as the responsible entities for meeting the standard.

[2] There are 26 states which now have an Energy Efficiency Resource Standard and two ISOs, New England and PJM, have also incorporated EE into their forward capacity markets. The best practices of all of these sources have been gathered, most notably by the National Action Plan for Energy Efficiency.

3. *How should the crediting system and timetables be designed?*

The design of the crediting system and the timing and stringency of the targets will necessarily impact the mix of technologies deployed as well as the ultimate costs imposed on end-use customers. For example, previous RES and CES proposals have called for taking certain existing technologies out of the baseline for purposes of calculating the mandate (e.g. conventional hydropower), while providing full credits to new resources.

Key Questions:

- *Should the standard's requirements be keyed to the year 2035 or some other timeframe?*

The President's target of 80 percent clean energy by 2035 is ambitious but reasonable and achievable, and should be adopted. While a higher target might ultimately be set for the electric sector for the year 2050, in light of the difficulty of de-carbonizing the transportation and industrial sectors of the economy to achieve an overall economy-wide 80 percent reduction in greenhouse gas emissions by that year, this is an appropriate target for current policy. Ensuring early-year gains is critical in the effort to reduce emissions.

- *What interim targets and timetables should be established to meet the standard's requirements?*

Different clean energy sources have different lead times. Any attempt to shape the "ramp rate" of the CES requirements to take those lead times into account would distort the competition among those sources and bring political and regional favoritism into play. A simple and neutral straight-line trajectory should be adopted – e.g., to 40 percent on an annual average basis by the end of 2015, 50 percent by the end of 2020, 60 percent by the end of 2025, 70 percent by the end of 2030, and the targeted 80 percent by the end of 2035.

- *What are the tradeoffs between crediting all existing clean technologies versus only allowing new and incremental upgrades to qualify for credits? Is one methodology preferable to the other?*

Existing clean energy production should count towards the goal, but should not generate or receive credits that would dilute the market and favor utilities with access to existing clean energy sources. Similarly, there should not be any credit given for energy efficiency investments made prior to enactment of the Clean Energy Standard, even though they continue to generate the equivalent of clean energy.

- *Should partial credits be given for certain technologies, like efficient natural gas and clean coal, as the President has proposed? If partial credits are used, on what basis should the percentage of credit be awarded? Should this be made modifiable over the life of the program?*

Partial credits should be awarded to technologies, like efficient natural gas usage and clean coal with CCS, to the extent they achieve energy production that is cleaner than the fleet average coal plant at the time of enactment. A combined-cycle natural gas plant should be able to operate at about 60 percent generation efficiency, while the average for the fleet of coal plants is slightly above 30 percent. Thus while a carbon-free energy source displacing that coal plant's generation would get a full credit, the natural gas plant, displacing about half the carbon emitted by that coal plant, would receive half a credit per unit of production.

- *Is there a deployment path that will optimize the trade-off between the overall cost of the program and the overall amount of clean energy deployed?*

Including energy efficiency as a creditworthy source of clean energy will do more to reduce the overall cost of the program and to increase the amount of clean energy achieved than any other single element of the program design. As the largest potential source of clean energy that is available without a significant lead time, it would allow a low-cost deployment path, even with significant early compliance requirements.

- *What would be the effect of including tiers for particular classes of technology, or for technologies with different levels of economic risk, and what would be a viable way of including such tiers?*

The effect of including sub-requirements for specific classes of technology would be to diminish the effectiveness of the standard as a whole in making the most cost-effective determinations among the various classes of technology. There is no point in having a general Clean Energy Standard if it includes mandatory percentage participations by specific technologies.

- *Should the same credit be available to meet both the federal mandate and an existing state standard or should a credit only be utilized once?*

The same unit of clean energy production or efficiency gain should be available to meet any applicable state standard as well as the federal Clean Energy Standard.

- *Should there be a banking and/or borrowing system available for credits and, if so, for how long?*

Banking and borrowing could be permitted within a narrow range and for a limited time. The CES might provide, for example, that any utility could borrow up to 10 percent of the credits needed to meet its annual requirement and retain them for up to five years toward later compliance, but could not use previously banked credits for more than 10 percent of its requirements in any given year.

4. *How will a CES affect the deployment of specific technologies?*

The value and expected future value of clean energy credits created by a CES will be the primary driver of clean energy deployment. Each technology faces different economic and financing issues. Some, such as nuclear energy, face significant upfront capital costs but low ongoing fuel costs. Others, such as natural gas power plants, may be deployed relatively inexpensively but with a higher percentage of ongoing costs coming from fuel. How credit value changes the economics of each individual technology will determine which technologies get deployed.

Key Questions:

・ *How valuable would clean energy credits have to be in order to facilitate the deployment of individual qualified technologies?*

The Energy Future Coalition has not carried out an analysis to support answers to this and the three following questions. Definitive answers would not be possible in any event, as a Clean Energy Standard would merely add new parameters to an evolving situation with too many uncertain and changing factors to permit accurate long-range forecasting of market shares and costs.

・ *How might a CES alter the current dispatch order of existing generation (such as natural gas-fired power plants), which has been driven by minimization of consumer costs, historically?*

・ *What is the expected electricity generation mix for a target of 80 percent clean energy by 2035, under the President's proposal or an alternative construct?*

・ *Could different crediting and requirements than those proposed by the President be more effective in deploying clean technologies?*

5. *How should Alternative Compliance Payments, regional costs, and consumer protections be addressed?*

In considering a CES, it is important to consider the additional costs that may accompany such a policy and how those costs may vary by region. Some regions of the country contain more abundant energy resources than others, and utilities within those regions may be utilizing vastly different fuel mixes. Important design goals for a CES are to ensure price certainty for consumers and industry, minimize regional disparities in the cost of such a policy, and contain costs overall. The RES contained in S. 1462 last Congress included cost containment mechanisms such as limiting the electric rate impact of a utility's incremental compliance costs to not more than four percent per retail customer annually; an Alternative Compliance Payment (ACP) that was available for utilities that determined they could not meet the program requirements; providing a potential variance if transmission constraints prevent service delivery; and potentially allowing waivers for reasons of Force Majeure.

Key Questions:

・ *What are the anticipated effects on state and regional electricity prices of a CES structured according to the President's proposal? What are the anticipated net economic effects by region?*

The Energy Future Coalition has not performed any economic projections to answer this question, and it is doubtful that any such projections could be relied upon, due to assumptions that would have to be made about the costs and timing of new technologies, the costs of fuels in the market, and the influence of myriad other market factors. However, it is clear that including energy efficiency in a CES would ensure that the total costs of the policy would be dramatically lower, and any regional disparities in access to clean energy dramatically less, especially in the early years, than if energy efficiency were left out, for reasons stated above.

- *Would other CES formulations or alternative policy proposals to meet a comparable level of clean energy deployment have better regional or net economic outcomes?*

A CES has the advantage of allowing clean energy sources to compete with each other on the basis of cost and availability over time, extracting market efficiencies that any directed policy dictating market shares for various clean technologies would not achieve, and optimizing the national result of the policy. Trying to shape a CES to achieve better regional outcomes seems almost certain to worsen the national outcome, and is certain to distort the choices of clean energy from those that would otherwise be made.

- *How might various price levels for the ACP affect the deployment of clean energy technologies?*

The higher the alternative compliance payment, the greater the economic impetus to make the necessary investment in clean energy. The ACP should always exceed the cost of lower-cost clean energy sources that are readily available, such as the average cost of achieving energy efficiency gains, or utilities would be drawn to pay for compliance rather than adopt clean energy.

- *What options are available to mitigate regional disparities and contain costs of the policy?*

Options such as regionally varying ACPs need not be designed into the initial CES policy because energy efficiency options are available everywhere. If needed later, such options could be enacted by a future Congress.

- *What are the possible uses for potential ACP revenues? Should such revenues be used to support compliance with the standard's requirements? Should all or a portion of the collected ACP revenues go back to the state from which they were collected? Should ACP revenues be used to mitigate any increased electricity costs to the consumer that may be associated with the CES?*

Any ACP revenues should be used to facilitate the success of the CES program, and indeed should be focused on achieving success in the state or region where the utility chose the ACP as its means of compliance. However, the revenues should not merely be returned to the utility to do so, but should be utilized by the State or local governments in a manner independently judged

by them to increase local clean energy – by providing support for local energy efficiency efforts, for example, or contributions to the infrastructure needed for clean energy production.

Ratepayers should not be penalized if their utilities fail to invest in clean energy alternatives and instead pay ACPs, but returning the ACP revenues to ratepayers through their electricity bills would relieve the pressure the utilities should face to find real means of compliance. Another mechanism, such as property tax rebates, could be used instead.

- *Should cost containment measures and other consumer price protections be included in a CES?*

The inclusion of energy efficiency as a compliance option for utilities should ensure that no consumer price protection is needed. Building cost containment mechanisms into the CES at the start will only tend to ensure that the cost ceilings are reached, as complying utilities will lose their own motivation to minimize the costs of compliance.

- *How much new transmission will be needed to meet a CES along the lines of the President's proposal and how should those transmission costs be allocated?*

Significant amounts of incremental transmission capacity will be required to meet an 80 percent CES by 2035. For this reason the Energy Future Coalition has organized the National Clean Energy Transmission Initiative, which seeks to identify consensus policy approaches to add such transmission. It would simply not be possible to add the incremental clean energy production that will be required to meet a robust CES without new transmission capacity.

How much new transmission will be required is impossible to estimate. For the next 20 years, before additional nuclear power or coal-fired generation with carbon capture and storage comes on line in any significant amount, the most promising clean resources are wind and solar energy. Both of these technologies are available now on a commercial basis. Both achieve their greatest cost-effectiveness in large central installations. They are subject, however, to variations in wind strength and insolation that create significant regional differences in the economics and quantities of energy available. Unfortunately, many of the most promising renewable energy production areas are also areas unserved or underserved by high-voltage electric transmission connecting them to the grid and its markets.

As the Committee knows, our system for planning, paying for, and siting high voltage transmission lines is broken. Inadequate transmission is preventing the development of new clean energy resources today in every part of the country. A CES cannot be implemented successfully at the level proposed by the President, or anything close, unless the policies governing high voltage transmission are reformed and updated in a timely manner. The Federal Energy Regulatory Commission (FERC) has proposed undertaken a number of important initiatives to address these issues within its jurisdiction, facilitating regional transmission planning and examining the options for transmission cost allocation – initiatives that could do much to bring clean energy to market. Transmission costs at present amount to only 7 percent of a typical customer's electric bill – compared with two thirds for electric generation. New

transmission should thus have only minimal impacts on consumers' electric bills, and will likely produce net savings by increasing competition, lowering prices, and making the grid more efficient.

The time required to provide new transmission capacity is significantly greater than the time required to site and build new generation. A central solar plant or wind farm, for example, can be planned and built in a period of less than four years. A new transmission line would probably require at least twice that time under current policy. This means that planning, siting, and cost allocation for new electric transmission must proceed even *before* the energy production it will facilitate is constructed. Since high voltage lines generally benefit customers over large regions, it makes sense to adopt an open and efficient process to plan them collaboratively and broadly share their costs, as has been done recently in SPP and MISO. Adopting impossibly precise and therefore effectively arbitrary standards for allocating costs would bring both transmission expansion and the development of America's best renewable energy resources to a halt. We urge the Committee to continue its support for fair and expeditious regional transmission planning and cost allocation processes to level the competitive playing field for renewable and other clean energy resources.

- *What are the costs associated with replacing or retrofitting certain assets within the existing generation fleet in order to meet a CES?*

The answer to this question cannot be estimated with any accuracy in advance, due to assumptions that have to be made about the alternatives. If the relatively low price of natural gas, combined with stronger emissions requirements, leads to a major shift in fuel use in the generation of electricity, and if investments in energy efficiency stabilize or reduce the demand for power, the costs of a CES would be minimal and may in fact be negative. Some incremental costs that could be required to meet a CES are likely to be required over time for other purposes such as minimizing criteria air pollutants.

- *What level of asset retirements from within the existing generation fleet are anticipated as a result of a CES?*

While no definitive estimate is possible, it is likely that a number of the older and least clean generating assets from the existing fleet will be retired rather than warrant the level of investment required to allow them to meet the standard. Given the extended age of many current generators, many held in service precisely because future policies for generation requirements have been uncertain, the oldest plants are the most likely to retire. A CES might accelerate the existing timetable, but even in 2035 20 percent of generation will not fall under the CES, so the youngest and most efficient units in the current fleet can continue to operate.

6. *How would the CES interact with other policies?*

The credit value generated by imposition of a CES may not, by itself, be enough to address obstacles faced by particular clean energy technologies. For example, the deployment of solar panels has raised concerns about land use changes in certain desert areas. Coal with CCS

confronts post-closure liability issues and the extraction of the feedstock itself has become subject to increasingly stringent regulatory treatment. For nuclear power, financing new projects has been difficult due to significant, up-front capital costs. All domestic energy development projects face substantial permitting hurdles. Reaching the President's CES target of 80 percent by 2035 will require a diverse set of resources, so technology-specific supporting policies may be necessary.

Key Questions:

· To what extent does a CES contribute to the overall climate change policy of the United States, and would enactment of a CES warrant changes to other, relevant statutes?

In the absence of a general economy-wide climate change policy, a well-constructed CES could help deploy clean energy resources and energy efficiency, and create the market certainty needed to do so. It also would help create an effective policy to diminish greenhouse-gas emissions for a key sector of the economy, the electric power sector. As a regulated industry, the electric sector might be expected to adjust more readily to the constraints of a mandate-based policy than the transportation, residential, or commercial sectors.

While the Energy Future Coalition has not surveyed existing law to confirm that a CES would mesh well in the current statutory structure at federal and state levels, a CES would not appear to conflict with the legal structure under which utilities commonly operate. Utilities would have a broad array of compliance options, and for a significant part of their portfolio, diminishing to 20% by the end of the period, could utilize any supply sources while still complying. Unless there are laws or policies requiring utilities to utilize non-complying resources of generation above the maximum levels permitted, utilities should be able to comply consistent with their obligations to supply power.

Some utilities are not accustomed under current policy to making investments on the customer side of the meter, to making energy efficiency investments of any sort, or to recovering from customers the costs of investments that reduce their sales, and may even be barred by practice or policy from doing so at present. Other utilities may not have retained the obligation to procure supply in states that have unbundled the transmission, distribution, and commodity supply functions, so identifying the appropriate entity to comply with the CES may present challenges.

· What are the specific challenges facing individual technologies such as nuclear, natural gas, CCS, on- and offshore wind, solar, efficiency, biomass, and others?

It goes without saying that all electricity supply resources face challenges of their own, and the Energy Future Coalition has spelled out above those facing efficiency as a resource. What are presented above as comparative advantages for energy efficiency – low cost, large scale, short lead-time, current readiness of technology, lack of incremental environmental impact, leveraged effect on upstream emissions, and wide availability throughout the nation – can be seen as the comparative challenges facing other clean energy sources competing with energy efficiency to fill out a clean energy requirement. The Energy Future Coalition does not, however, discern

challenges that face these clean energy options as they vie to participate in a CES program that they do not already face in the market for energy services today without a CES in effect.

- Will the enactment of a CES be sufficient for each technology to overcome its individual challenges?

The enactment of a CES seems likely to create a general impetus in the market for procurement of more clean energy sources more quickly than would occur under current policy. It does not seem likely to drive inappropriate choices among them, provided they are all included and selected on their own merits. It should therefore assist each source in overcoming its own individual challenges without favoring any unduly. Whether such a competitive process will be sufficient to allow each technology to overcome its own challenges will only be possible to judge after it operates, and may indeed lead to different judgments by different participants based on the ultimate portfolios of clean-energy sources selected to meet the standard.

- Should there be an examination of energy connected permitting?

The Energy Future Coalition recognizes that there are controversies about various aspects of energy facility permitting. Such controversies can only benefit from examination, and there is no reason to delay any appropriate resolution to such a controversy. There is nothing about adopting a CES, however, that should by itself change the terms of debate about permitting, or that would necessarily change the timing required for permits. Permitting authorities would certainly become aware of the new urgency of completing clean energy projects arising from adoption of a CES, and would be expected to react appropriately to that urgency. Nothing about the CES process warrants short-cutting any permit process in the view of the Energy Future Coalition. Nor should such short-cutting of permit processes be necessary to meet an appropriate near-term clean energy standard: no permit is normally required for energy efficiency measures, and opportunities to move forward with them are many, as noted above.

- Are there specific supporting policy options that should be considered for coal, nuclear, natural gas, renewable energy, and efficiency?

The Energy Future Coalition has no specific recommendations at this point with regard to supporting policy options, other than the general recommendation noted above that effective policy promoting investments in transmission capacity for renewable energy is a prerequisite for meeting a clean energy standard.

- What is the current status of clean energy technology manufacturing, and is it reasonable to expect domestic economic growth in that sector as a result of a CES?

The Energy Future Coalition believes it is reasonable to expect domestic economic growth in clean energy technology manufacturing as a result of adoption of a CES. This is the likely result

of the new certainty of higher and earlier future domestic demand for clean energy the standard will entail combined with the reality that transportation of renewable energy equipment is a key element of its costs, promoting domestic manufacture. This is clearly the case with energy efficiency technologies, which are dominantly manufactured in the United States (See chart attached to separate comments submitted by the Energy Future Coalition on behalf of Rebuilding America).